New Hampshire Outdoors

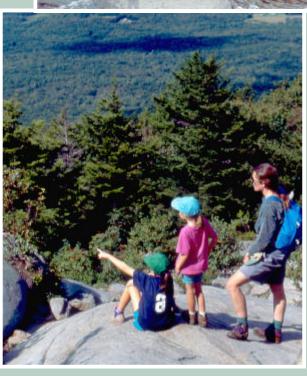
2003-2007

Statewide Comprehensive Outdoor Recreation Plan

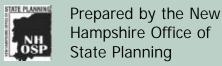








March 2003



NEW HAMPSHIRE OUTDOORS, 2003-2007

Statewide Comprehensive Outdoor Recreation Plan (SCORP)

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SECTION 1: OVERVIEW

Purpose

New Hampshire Outdoors, 2003-2007 is New Hampshire's Statewide Comprehensive Outdoor Recreation Plan (SCORP). It serves as the State's official plan for outdoor recreation for the ensuing five years. The SCORP identifies major issues and challenges concerning the state's recreation and natural resources and offers a series of recommendations to address those issues. In some cases, the recommendations are guidelines; in others, they give direction for specific action, particularly for State agencies. This document satisfies a requirement of the Federal Land and Water Conservation Fund (LWCF) program that each state have an approved SCORP on file with the National Park Service (NPS) in order to participate in the LWCF program. It also fulfills New Hampshire statutory requirements (RSA 12-A:18) for an outdoor recreation planning program.

How To Use This Plan

This Plan can be used as a reference guide or information source for those interested in recreational trends, supply, and demand. Data is provided, often on a county-level, for the supply of recreation and open space lands in the state, as well as on nationwide and statewide demand. This Plan can also give recreational providers and decision-makers information characterizing major recreation-related issues in the state, and some recommendations for addressing these issues. Finally, this Plan provides more specific guidance to communities and school districts about how stateside Land and Water Conservation Fund (LWCF) monies for communities will be targeted in the upcoming five-year period.

New Hampshire Outdoors

With just a little over 9,000 square miles of land area, and 5,900 miles of shoreline/riverfront, New Hampshire's natural and cultural landscape provides a great setting for people to participate in a wide range of outdoor recreation opportunities. New Hampshire's four-season climate allows for a great diversity of recreational pursuits, from alpine and cross-country skiing or snowmobiling, to swimming, boating, and sunbathing. "Leaf peepers" come from all over the world to enjoy the renowned autumn foliage of the state as they travel scenic byways by automobile, bus and bicycle.

New Hampshire is home to approximately 1,000 lakes and ponds, 18 miles of coastline, and 1,200 miles of rivers. They possess significant recreational potential, including opportunities for swimming, water sports, fishing, and boating. Over 83 percent of New Hampshire is heavily forested, including the popular 760,000 acre White Mountain National Forest (WMNF) offering scenic beauty as well as vast opportunities for hiking, camping, picnicking, and wilderness experiences. In addition, over one million acres of private forest and agricultural land is available for public uses such as hunting, fishing, nature appreciation, hiking, and ski touring. The state harbors hundreds of species of fish and wildlife, including popular game species, and several endangered and threatened species enjoyed by naturalists, birdwatchers, and photographers. New Hampshire's historic resources, rich in tradition, contribute to the state's scenic beauty and cultural

heritage. Small historic villages, distinctive architecture, covered bridges, winding country roads, and historic sites are all part of that tradition.

Tourism is one of the most important industries in the state. Our natural and cultural resources are important draws; inspiring millions of residents and out-of-state visitors to enjoy the state's mountains, forests, lakes, rivers, and coastline. Promoting and encouraging the enjoyment of the state's outdoors builds the tourism industry and increases its contributions to the state's economy. With this, however, also comes the need to consider issues related to providing for outdoor recreation and our state's ability to manage and steward our resource base. New Hampshire's outdoors is crucial to residents' quality of life and the continued success of our tourism industry. It is important for the State to protect what it also seeks to promote.

What is "Outdoor Recreation"?

With this diverse array of natural and cultural resources, outdoor recreation is comprised of countless activities that are categorized in a variety of ways. Some activities require specialized skill or equipment (e.g. rock-climbing, off-road recreation vehicle); others such as picnicking can be enjoyed by anyone. Some activities require a structured environment and take place in developed recreation areas (e.g. tennis); others, such as walking, are unstructured and can take place in many different places, at any time. Activities can be motorized or non-motorized, consumptive (e.g. hunting, fishing) and non-consumptive (e.g. bird-watching), active (soccer) or passive (sightseeing), have relatively high impact (e.g. All-Terrain Vehicles) or low impact (e.g. hiking).

Different resources classify recreation in different ways. Below are two examples. In the *Illustrated Book of Development Definitions* (Moskowitz and Lindbloom, 1993), recreation is described as either passive or active. In this book, active recreation consists of leisure activities that "require equipment or take place at prescribed places, sites, or fields". Passive recreation includes those that are relatively inactive or "less energetic", but also mean "open space for nature walks and observation".

The National Survey on Recreation and Environment (NSRE), one of the most widely cited surveys on recreation, includes over 80 activities in its survey of US residents and classifies outdoor recreation by the type of environment the activity relies upon. Activities are classified as either land-based, water-based, snow/ice-based, or developed. In the NSRE, land-based activities include trail, street and road activities, camping activities, hunting, outdoor adventure activities (e.g. horseback riding, mountain climbing), viewing/learning activities (e.g. wildlife watching), and social activities (e.g. family gatherings). Water based activities include a range of boating/floating activities, fishing, swimming activities, and viewing activities. Snow and ice-based activities include downhill activities (e.g. snowboarding, skiing), cross country activities, ice-skating and snowmobiling. In the NSRE, developed recreational activities (i.e. those that require a developed setting or facility) include golf, tennis, outdoor team sports, and attending sporting events or other outdoor events.

This SCORP plan recognizes that people participate in a broad range of activities that can all be considered part of outdoor recreation. Some activities may rely on developed recreational sites, others rely on large tracts of undeveloped open space, or access to public waters. In this report, recreation facilities include sites that provide for activities requiring some type of constructed or built facility. Examples might include established campgrounds, picnic areas, boat launches, fishing piers, tennis courts, golf courses, and the like. Recreational areas may offer recreational facilities or may offer opportunities for more dispersed recreation such as hiking, bird watching, or mountain biking. Some recreational areas may have established facilities; others may not. Undeveloped open space (public or private) can also provide for dispersed recreation activities such as hiking, hunting, snowshoeing and nature observation.

Planning Process

The broadness of this topic mandates that this statewide plan identify and address many different outdoor recreation-related issues and needs. Accordingly, the planning process used to help understand these issues and needs requires consideration of many different perspectives.

Steering Committee. Several methods were used to help identify issues of statewide importance. A SCORP Steering Committee was identified to provide the most direct input and guidance in the planning process. This committee met several times during the planning process to help form the direction of the plan, to review and revise major issue areas, well as identify recommendations to address these issues.

Public Advisory Committee. A second, larger SCORP Public Advisory Committee was also developed in order to provide a wider range of organizations an opportunity to provide input and feedback about major recreational issues facing New Hampshire. The Office of State Planning and the Department of Resources and Economic Development identified the advisory committee jointly. This larger group met twice during the planning process. The first meeting was held early on in the planning process. Organizations were invited to attend an Outdoor Recreation Forum to offer direct input geared to help frame issues of statewide importance for the SCORP (**see Appendix B**). A second forum was conducted to offer this same group an opportunity to provide feedback and suggestions about SCORP recommendations. The University of New Hampshire Cooperative Extension staff served as facilitators at both forums.

Stakeholder Group Survey. Early on in the process, a concern was raised that recreation touches upon a much wider range of interests than could be reflected by a public advisory committee. In addition, the Office of State Planning looked to expand statewide knowledge and awareness of the SCORP planning process. With these thoughts in mind, the Office of State Planning worked with the University of New Hampshire (UNH) to undertake a Stakeholder Group Survey as both an information gathering technique and public participation and communication techniques.

In the summer of 2002, UNH developed a database of organizations and businesses related to recreation and conservation in New Hampshire. This database was meant to

establish baseline information about a range of organizations and serve as the invitation list to participate in the organization version of the web survey. In all over 3,000 organizations and businesses were identified. Interests ranged from State agencies to local recreation clubs, conservation organizations to recreation directors, tourism organizations to ski clubs, all-terrain vehicle (ATV) clubs and fishing/hunting clubs.

Directors, contact persons, or other leadership of organizations included in this database were sent a post card explaining the purpose of the survey and asking their organization for input. They were given a choice of either logging on to a web site to complete the survey online, or were given an opportunity to call a toll free number and receive a hard copy of the survey in the mail. For those contacts with email information, UNH also sent two email invitations with direct hyperlinks to the web site. In addition to this targeted outreach effort geared towards recreation and conservation organizations, press releases were sent to newspapers across the state and information was posted on the Office of State Planning's website asking for public input. The survey itself asked respondents to identify recreational issues and asked for strategies for addressing these issues, asked for opinions about public funding priorities related to recreation, and asked about personal awareness of the SCORP and Land and Water Conservation Fund.

Participants were directed to either an organizational or public version of the website. Data collection began in mid August and ended by the end of September. While this public input process would ideally be allowed to continue over a period of several months, the tight timeline did not allow for this. By the end of September, about 225 organizational responses and 250 other public responses were received.

Findings. As told by the wide variety of outdoor recreational interests that responded to this survey, this effort appears to have been a good first attempt at casting the SCORP planning process out to a wider audience. Clearly, a majority of respondents had little direct knowledge of either the SCORP or the Land and Water Conservation Fund before completing the survey. Less than 18 percent of organizational leaders were familiar or extremely familiar with the SCORP and only eight percent of public respondents were familiar or extremely familiar with the SCORP. Over 43 percent of organizational leaders and over 60 percent of public respondents said they did not know that local communities and school districts could apply to DRED for LWCF funds. Those who did not participate in this survey are potentially even less aware of the SCORP process or funding opportunities than those who did participate.

Beyond public education and information, a main goal of the survey was to solicit feedback about outdoor recreation issues of importance in the state. Respondents were asked in their own words to discuss major issues, barriers, and potential problems they see related to outdoor recreation. These open-ended responses provided a wealth of information about different stakeholder viewpoints and perspectives.

Because of the broad range of open ended perspectives and responses received, the UNH staff also reviewed and categorized responses as a means of better understanding trends and common themes. This content analysis informed the SCORP planning process by

providing information about commonly perceived barriers and common perspectives for addressing issues. For instance, many stakeholders, regardless of individual recreational preferences, indicated that the State could better address issues by forging partnerships and enhancing collaborative efforts among diverse recreational users, by providing better information to the public and supporting or providing better education of recreational users. Other themes that came forth included the need for better planning, research, and the need for more funding.

An important outcome of this survey is that many respondents, regardless of a particular recreational preference or attitude (e.g. there is too much motorized access or, alternatively, there is too little motorized access in New Hampshire), generally recognized common themes and needs related to resolving issues. This set an important foundation for building the SCORP recommendations discussed later in the document. A summary report of these open-ended responses can be found in **Appendix C-2**

Quantitative information (e.g. data reported numerically) was also gathered to serve as a reference point, including respondent attitudes towards recreation spending and funding priorities. This information helped to characterize respondents/stakeholders and their viewpoints. While informative background information, this data has certain limitations. This numerical data cannot be used to portray or represent attitudes of the entire population of state residents because respondents to this survey were self selected, not part of a random sample of state residents. More detailed results of the stakeholder group survey, including a full description of methods, can be found in **Appendix C-1**.

While this stakeholder attitudinal data is not referred to directly in the SCORP, there is a baseline of statewide resident attitudes towards recreational issues available via a recent University of New Hampshire *Statewide Outdoor Recreation Needs Assessment*. An overview of this 1997 statewide resident survey is reported in the "Recreational Demand" section of this report and a summary report is available in **Appendix A**. An update and follow up to this statewide assessment is expected before the next SCORP is completed (2008).

Regional Meetings. In addition to the Steering Committee, Public Advisory Committee, and the UNH Stakeholder Survey, six regional meetings were held across the state in early to mid December 2002 to seek public comment and input on the draft SCORP plan. These meetings ran concurrently with the month long public comment period on the draft SCORP. The range of comments helped the Steering Committee decide upon the final content of the plan. Summaries of the public meeting discussions are available at OSP upon request.

Focus of Plan

This plan has two main components. The first is intended to provide a broad understanding of outdoor recreation demand, need and participation trends in New Hampshire. The second is to identify and develop an understanding of major recreation-related issues faced in the state. This plan provides guidance for how New Hampshire

expends federal Land and Water Conservation Fund (LWCF) monies on a community level and provides direction for addressing statewide recreational issues.

The first section provides a summary of available statistics and data related to the supply and demand for outdoor recreation. National and statewide trends are highlighted in the beginning and summarized throughout. Specific regional issues and trends were not identified in this planning process due to financial, staffing, and time constraints¹.

The second main section provides information about recreation issues of statewide importance. The highlights of each issue are summarized in the beginning, followed by reference information about programs and initiatives that frame the issue in New Hampshire. Using this information as a foundation, goals, objectives, and strategies are then provided to act as a framework for how New Hampshire can address these issues. Some strategies relate directly to how LWCF funds could be expended, while other strategies consist of broader policy or practical recommendations. Though some recommendations are targeted to specific agencies/organizations, many can be applied on either a statewide, regional, and local level.

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¹ It is recommended that future SCORP planning efforts examine demand and need on both a regional and statewide level to better meld trends/findings from this plan with other regional and local planning efforts.

SECTION 2: SUPPLY, DEMAND, AND NEED

MAJOR TRENDS

National Trends & Management Considerations. One of the most current and comprehensive looks at outdoor recreation trends and future demand in the US is found in a book entitled *Outdoor Recreation in American Life* (Cordell, 1999). An important component of this assessment deals with identifying major outdoor recreation participation trends. The study reflects on some general findings and discusses future challenges as participation in outdoor recreation continues to grow and become an increasingly central part of American life. The discussion below provides a sampling of some of the major trends expected in the US.

Outdoor recreation is a fundamental aspect of life for most Americans. Almost everyone participates in some kind of outdoor recreational activity. The most popular are casual activities such as walking, sightseeing, and visiting beaches. Demand for most activities is increasing, because of sheer increases in population, increases in popularity, or both. More people are participating in a wider variety of activities today than was the case 10 or 20 years ago.

Below are several specific national management considerations, also identified in *Outdoor Recreation in American Life*, that provide useful guidance in framing general recreation trends in New Hampshire.

- The most popular sites will experience greater and greater congestion in the future.
- There will likely be more conflicts among recreationists as they vie for use of the same areas at the same times.
- Access to both developed sites and dispersed areas will become an ever more important management issue.
- Changes in race, age, income, culture, etc. will continue to change the type of demand for recreation opportunities, however, overall demand will continue to increase.
- The number of organized groups (representing a wider variety of outdoor recreation interests) will continue to grow and will have an increasingly large voice in public land management.
- Pressure is expected to be particularly heavy at already popular water sites, especially with advances in technology.
- Travel and tourism will continue to grow if transportation and access to resources remains affordable and available.

State Trends. Several other information sources also provide data that helps to frame outdoor recreational trends in the state. The findings and trends listed below are meant to provide a general flavor for recreation demand and need across New Hampshire. Refer to the details of this report, or to the original data source, for more detailed information.

- A majority of recreational land acreage is found in the northern part of New Hampshire. Greater numbers of smaller recreational sites are found in the southern part of the state.
- On average, slightly more than 52 percent of New Hampshire land acres were enrolled in Current Use as of 2001. Statewide, about 39 percent of Current Use Lands received the recreational adjustment that same year.
- State Parks have seen an increase in attendance. Current estimates indicate State Parks saw around 6.69 million visitors in 2001.
- According to the *Comprehensive Statewide Trails Study* (OSP, 1997) US Forest Service Data shows a 23 percent increase in trail use in the WMNF between 1974 and 1995.
- Wheeled off-highway vehicle registrations, both in-state and out-of-state, are increasing. Total registrations have more than doubled in the last seven years. Out-of-state registrations have more than tripled.
- Out-of-state snowmobile registrations are steadily increasing. Out-of-state registrations have more than doubled in the last seven years, while in-state registrations have remained steady.
- Boating registrations doubled between 1980 and 1990 alone, and have increased over 19 percent between 1990 and 2000
- According to the 2000 Census, the average age in New Hampshire is increasing. The average age, as of 2000, in New Hampshire is 37.1 years. This compares to an average age of 30.1 in 1980 and 32.8 in 1990. An aging population will impact participation trends over time.
- According to US statistics, New Hampshire, Massachusetts, and New England as a region, all have higher income levels than the United States average. People with middle incomes tend to show higher participation rates in outdoor recreation than those with low incomes.
- Between 1990 and 2000, the state's population has increased by over 11 percent, meaning that demand for outdoor recreation opportunities (as measured by number of people participating) is also likely to increase.
- Many of the most popular activities in New Hampshire are similar to those identified in nationwide studies. Wildlife observation, driving for pleasure, sightseeing, and jogging/running/walking are extremely popular activities. Additionally, these activities show a high frequency of participation. Day hiking seems to be more popular in New Hampshire than the national average.
- Native New Hampshire residents have higher participation rates than non-natives for several different outdoor recreational activities including hunting, fishing, motor sports, activities that require developed settings, and active pursuits (e.g. such as swimming, jogging, hiking, rock climbing, etc.).

- The most popular activities in the WMNF include viewing wildlife and natural features, sightseeing, hiking and walking, general relaxation, driving for pleasure on forest roads, cross-country skiing, and developed camping.
- Available LWCF grants in 2000 and 2001 fell far below the demand for funding. In those two years, there were 65 local proposals totaling almost \$4.5 million in requests. A total of 15 grants equaling \$1.35 million were awarded.
- Seventy six (76) percent of recreational leaders (recreation directors) surveyed in a 2001 UNH survey felt that local recreational demand currently exceeds supply.

RECREATION SUPPLY

New Hampshire has a rich natural and cultural heritage. Our landscape lends itself well to a wide range of recreational pursuits, enjoyed by residents and tourists alike. This heritage is an important reason why New Hampshire continues to be a popular place to visit and an even more attractive place to call home.

Residents of New Hampshire have a strong connection with the outside environment. In 1997, the University of New Hampshire (UNH) conducted a *Statewide Outdoor Recreation Needs Assessment* of New Hampshire residents. According to this study, over 81 percent said that New Hampshire's scenic beauty and cultural heritage were important to them personally. Sixty-one (61) percent of respondents agreed that outdoor recreation plays a central role in their lives. Given recreation's centrality, planning for outdoor recreation is important to help ensure that high-quality recreational opportunities remain available for future generations. Planning is also necessary to ensure that the state's natural and cultural heritage is maintained in the face of changing conditions and trends. Understanding the quality and quantity of New Hampshire's recreation supply as well as trends in demand provide some guidance and direction to the planning process.

An understanding of "Recreational Supply" can be gained through quantitative inventories of existing facilities and resources, as well as through more qualitative means of gauging resource conditions. Maps and inventories in New Hampshire exist for both conservation lands and for lands with recreational facilities. Much of the information that follows is presented by county. County-level divisions provide a starting place for understanding regional variations that may exist beyond a reported statewide average. Figure 1 shows a map of New Hampshire's 10 counties as a reference.



Figure 1. Counties of New Hampshire

Conservation Lands in New Hampshire

The New Hampshire Geographically Referenced Analysis and Information Transfer System, better know as <u>GRANIT</u>, maintains comprehensive statewide database of geographic related information. Sample databases include roads, town boundaries, surface waters and conservation lands. The statewide conservation lands layer provides acreage and ownership information about both publicly and privately held conservation land holdings with either permanent or limited protection. This database is also available on-line through the <u>GRANIT Conservation Lands Viewer</u>. This tool allows anyone to generate and print web-based maps of conservation lands. Table 1 below provides a summary of the public and private fee and easement holdings across the state, by acreage.

Table 1. Conservation Lands by Owner and Protection Type			
Ownership/Protection Type	Acres		
Federal Fee	762,535		
Federal Easement	3,808		
State Fee	189,602		
State Easement	32,854		
Municipal Fee	101,413		
Municipal Easement	34,361		
Private Non-Profit/Other Fee	130,991		
Private Non-Profit/Other Easement	94,724		
TOTAL	1,350,288		

Source: GRANIT, 2002²

Open space and conservation lands provide opportunities for many different recreational activities. These can range from developed, intensively used parks to remote wilderness experiences. While some parcels in this inventory may contain areas managed expressly for recreation, a majority of these lands are managed with a broader set of goals in mind. Other, sometimes over-riding, management goals might include preserving wildlife habitat, maintaining productive forest or agricultural lands, or protecting water quality or rare or endangered species. In some cases, protected lands may only be available to dispersed low impact recreation. In some cases, public access might not be allowed at all. Access varies and it is important to know and respect the landowner wishes before going on either public or privately held conservation lands.

Figure 2 below provides a visual snapshot of the state's conservation lands, categorized by private and public ownership. Note that several recent conservation land acquisitions involving large land holdings and easements have yet to be included in GRANIT. These lands will be added as data becomes available and transactions are finalized. Of particular note is the 171,500-acre Connecticut Lakes Headwaters area in northern Coos County.

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² The "state" data (fee and easement lands under DRED, NHFG, DES, etc.) is based on 2000 information. GRANIT's data on State fee and easement properties will be updated in 2003.

This landmark public/private partnership, to be finalized in 2003, will help protect a large-tract of important working forest land and maintain traditional recreational access to a substantial section of northern New Hampshire.

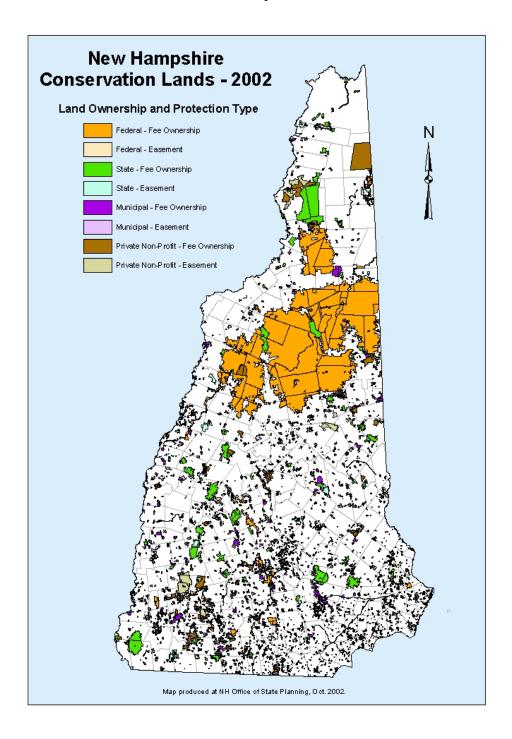


Figure 2. Public and Private Conservation Lands in New Hampshire

OSP Recreation Inventory

In addition to information on conservation lands, the Office of State Planning (OSP) periodically updates a statewide inventory of outdoor recreation lands in New Hampshire. The most recent statewide recreation inventory was conducted in 1997, updating the previous 1981 inventory. This inventory provides basic information about ownership and self-reported acreage at over 3,000 sites across the state, as well as information about general types of recreational activities available at each site. The inventory includes a majority of the conservation and open space lands mentioned in the previous section (up through 1997), along with some privately held recreational facilities/lands, municipal playing fields, playgrounds, and the like. This inventory represents the most current and complete database that is specifically devoted to identifying New Hampshire's outdoor recreation lands/facilities.

Table 2 shows that a majority of the recreational lands are in the northern part of the state. Almost 38 percent of lands identified in this inventory are in Grafton County. Adding Coos and Carroll to this, the three northern counties comprise nearly 75 percent of the state's recreation lands. The White Mountain National Forest makes up a substantial part of this total.

Table 2. State and County Population Statistics, Land Acreage and							
Recreation Supply							
County	2000	Total Land	Recreation	Number of			
	Population	Acreage	Acreage	Sites			
Belknap	56,325	257,726	25,775	271			
Carroll	43,666	598,397	192,825	354			
Cheshire	73,825	452,911	72,869	356			
Coos	33,111	1,152,947	329,617	271			
Grafton	81,743	1,096,324	544,337	454			
Hillsborough	380,841	561,351	50,617	617			
Merrimack	136,225	597,481	84,417	450			
Rockingham	277,359	446,221	40,361	654			
Strafford	112,233	235,093	12,492	282			
Sullivan	40,458	344,219	83,889	183			
TOTALS	1,235,786	5,742,660	1,437,199	3892 sites			

Sources: US Bureau of the Census, 2000 US Census – New Hampshire; OSP, 1997 New Hampshire Outdoor Recreation Inventory; Department of Revenue Administration, Current Use Report 2001.

In general, the northern part of the state can broadly be characterized by large land holdings, with fewer, larger individual recreational areas. The southern part of the state by contrast contains a larger number of smaller recreation sites. This difference makes intuitive sense given that the major population centers of the state are generally found in the southern part of the state, and the large tracts of protected land are located towards the north. While this information provides a general understanding of how recreational lands are distributed across the state, it does not shed much light on the types of recreational lands or their ownership.

Table 3 shows the breakdown of recreation lands by a set of activity types. The activity types presented below are only broad classifications and do not necessarily offer a detailed look at each site. While this statewide inventory provides a sampling of activities available at each site (up to 6), not all possible (or most popular) recreational opportunities were identified during the inventory process. Because of this, it is important to keep in mind that many of the individual sites may provide opportunities beyond that reflected by the classifications listed below³.

	Table 3. Number of Sites by Selected Activity Types									
	Camp- grounds	Field Sport Areas	Golf Courses	Historic Areas	Natural / Passive Recreation Areas	Parks / Picnic Areas	Water Sports/ Fishing Areas	Winter Sports / Skiing Areas		
Belknap	49	36	10	1	56	25	77	1		
Carroll	81	31	9	7	110	24	65	10		
Cheshire	36	77	7	3	137	29	44	3		
Coos	29	31	5	2	109	28	39	6		
Grafton	56	91	14	9	138	28	69	16		
Hillsborough	42	168	19	12	206	81	49	7		
Merrimack	27	104	13	19	206	49	63	8		
Rockingham	64	187	23	21	190	68	58	5		
Strafford	37	61	7	6	95	37	22	3		
Sullivan	9	36	5	6	49	31	28	2		
STATEWIDE	430	822	112	86	1296	400	514	61		

Source: 1997 OSP Recreation Inventory

Sites categorized as natural and passive recreation lands together represent the largest number of recreational lands available in the state. This is followed by sites categorized as field sport areas and then water sport areas. While there are over 820 field sport areas identified in the state, many are small in size and probably represent only a small fraction of the total acreage.

Looking regionally, Hillsborough and Rockingham Counties have the largest population, and also are home to the largest number of field sport areas, parks/picnic areas and golf courses. Given that people tend to participate (or <u>want</u> to participate) in these activities close to home, it is important that a higher proportion of these sites be located near the larger population bases. Also, it is important to note that there is a tendency for supply to drive demand. Greater supply of a certain types of recreation facility provides the public with greater opportunities to participate in that recreational activity.

This data also shows that Belknap County had highest number of water sports and fishing areas, while Strafford County had the fewest. Hillsborough, Merrimack, and

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³ Future inventories may want to expand upon this and provide a more systematic look at activities available at each site.

Rockingham Counties had the highest total of natural areas or "passive" recreation areas, though many of these are smaller in size than the sites listed in counties to the north or west.

The table below (Table 4) provides a county-level breakdown of recreational lands by owner type. These figures provide baseline information about how public and private recreational lands are dispersed across the state. Private lands under Current Use Taxation are not included in this recreation inventory. Current Use lands are examined separately in this report.

According to these 1997 figures, public lands make up the bulk the identified recreational acreage in New Hampshire. About 77 percent of total recreation acres in this inventory are owned by the federal or state government. Private non-profit organizations own about 11 percent, private for profit entities own nearly seven percent. Municipalities and schools make up the two smallest distinct categories. Municipalities own approximately four percent and schools own less than one percent.

Table 4. Recreational Land Acreage by Owner Type								
	Total Recreation Acres	Federal Acres	State Acres	Municipal Acres	School Acres	Private Non- Profit Acres	Private For Profit Acres	Other Acres
Belknap	25,775	2,610	5,753	3,590	474	8,176	2,572	2,600
Carroll	192,825	148,065	22,372	2,968	347	3,199	15,869	5
Cheshire	72,869	4,667	25,653	6,166	863	31,662	3,649	209
Coos	329,617	212,859	58,105	619	430	27,944	29,660	0
Grafton	544,337	482,985	27,854	4,497	373	10,029	18,217	382
Hillsborough	50,617	2,479	12,539	13,074	1,960	12,959	7,016	590
Merrimack	84,417	23,238	36,034	8,565	634	8,041	7820	85
Rockingham	40,361	150	24,361	5,569	1,215	4,140	4,903	23
Strafford	12,492	0	3,009	3,210	368	2,745	1,774	1,386
Sullivan	83,889	82	28,437	2,336	183	49,894	2,879	78
STATEWIDE	1,437,199	877,135	244,117	50,594	6,847	158,789	94,359	5,358

Source: 1997 OSP Recreation Inventory

Figure 3 shows how this federal and state ownership is divided among New Hampshire's ten counties. The northern counties, largely due to the White Mountain National Forest and some of the larger State Parks, have the highest percentage of recreational lands under state or federal ownership. Carroll, Coos and Grafton Counties all report over 80 percent. Strafford and Hillsborough counties have the smallest percentage of state and federal recreation lands, with 30 percent or less.

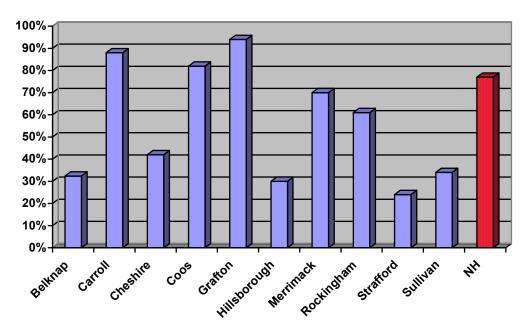


Figure 3. Percentage of Recreation Lands Federally or State Owned by County

Source: 1997 OSP Recreation Inventory

Supply of Public Access to Public Waters

In addition to the 1997 Recreation Inventory, the Office of State Planning is in the process of completing an inventory of "public" and "other" water access sites in New Hampshire. This inventory, when complete in 2003, will provide a range of information about each water access site, including ownership, types of facilities, and activity types. Although the inventory is not included in this SCORP, this database will be available for future recreation planning efforts.

In the State of New Hampshire, distinction is made for water access depending upon whether it is State owned or maintained.

- "Public" or State access sites are defined under RSA 270:20a as "...legal passage to any of the public waters of the state by way of designated contiguous land owned or controlled by a State agency, assuring that all members of the public shall have access to and use of the public waters for recreational purposes."
- "Other" access is defined in the *Public Access Plan for New Hampshire's Lakes, Ponds and Rivers* (OSP, 1991) as "...legal passage by way of designated land owned or controlled by a public entity (e.g. federal, municipal) or private entity (e.g. commercial, private nonprofit, individual landowner) for the purpose of providing active or passive recreational opportunities and/or use of the public waters of the state, and where such legal passage may or may not involve a fee."

In the absence of OSP's finalized water access inventory, the New Hampshire Fish and Game Department (NHFG), the lead agency for public water access, maintains an up-to

date inventory of their public, or State, access sites. Though this information does not provide a comprehensive look at all (e.g. private, municipal, federal) water access sites across the state, it does provide a solid base of information about sites guaranteed by the State⁴.

This data can also be examined by region to explore distribution of public access across the state. Table 5 below summarizes the number of public access sites by county. Information about parking is also reported to provide some indication about the type of access provided.

Table 5. NH Fish and Game Public Water Access Sites							
	Sites Listed	Trailer Parking	Canoe / Car-top Parking	Shorebank, Roadside or Other Parking			
Belknap	16	9	5	2			
Carroll	5	2	3	0			
Cheshire	10	5	3	2			
Coos	31	21	4	6			
Grafton	37	19	10	8			
Hillsborough	16	11	4	1			
Merrimack	44	28	10	6			
Rockingham	22	11	8	3			
Strafford	13	5	7	1			
Sullivan	16	9	1	6			
NH TOTAL	210	120	55	35			

Source: NH Public Access Sites, NHFG (2002)

Overall, the New Hampshire Fish and Game Public Access inventory lists 210 State-run public access sites on 151 different lakes, ponds and rivers. Merrimack County has the highest number of identified access sites, followed by Grafton County and Coos County. Merrimack County also had the highest number of trailer boat parking access sites.

This data can also be examined by comparing the number of public access sites in a region/county to the miles of available shoreline. These figures again allow for some general comparisons to be made across different counties in the state. Again, this information provides a baseline of State-owned water access. There are many "other" access opportunities provided by other public or private entities not reported in this table. Table 6 shows that, on average, New Hampshire has one public (State) water access site per 28 miles of shoreline. Carroll County, by far, has the fewest number of public access sites available per mile of shoreline/riverfront. Merrimack and Sullivan counties have the highest density of State-run access sites.

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⁴ The Department of Transportation and the Department of Environmental Services also provide some public access opportunities, not necessarily reflected in this total. These sites will be included in the complete water access inventory currently being completed by the Office of State Planning.

Table 6. Miles of Shoreline and Public Access Sites							
	NHFG SITES LISTED	MILES OF SHORELINE AND RIVERBANK	MILES OF SHORELINE PER SITE				
Belknap	16	420.6	26				
Carroll	5	711.4	142				
Cheshire	10	531.2	53				
Coos	31	817.4	26				
Grafton	37	820.0	22				
Hillsborough	16	688.5	43				
Merrimack	44	691.1	16				
Rockingham	22	549.3	25				
Strafford	13	354.4	27				
Sullivan	16	302.6	19				
NH SUMMARY	210	5886.5	28				

Sources: NH Fish and Game Department Public Access Inventory (2002) and GRANIT.

Current Use Lands

The 1997 OSP Recreation Inventory contains a major portion of available recreation lands in the state, but does not include the many privately held lands that are kept open at some level of traditional public access. Many activities, such as hunting, fishing, hiking, snowmobiling, and the like, rely heavily on private as well as public lands. Without access to private lands, opportunities to participate in many of these activities would become more limited and public lands would become increasingly crowded.

Capturing a true measure of quantity of private lands open to public access is difficult. Some landowners rely on verbal agreements or informal permits, both of which are difficult or impossible to measure. Though not complete, one proxy measure is to examine lands under Current Use. The Current Use Taxation Program, under RSA 79-A, was established in 1972 to:

"...encourage the preservation of open space, thus providing a healthful and attractive outdoor environment for work and recreation, maintaining the character of the state's landscape, and conserving the land, water, forest, agricultural and wildlife resources".

Under this program, parcels of land (10 acre minimum) are taxed based on their current use value as open space (e.g. active farm or forest land) rather than on their potential value for development purposes.

Table 7 below provides statistics about the percentage of total land acres in each county (water acres not included), the acres in Current Use, and the resulting percentage of total land acres that are in Current Use. On average slightly more than 52 percent of New Hampshire land acres were enrolled in Current Use as of 2001. This figure has remained relatively stable over the last several years. Sullivan County reports the highest

percentage of land under Current Use (69 percent), while Rockingham County reports the smallest percentage at just over 37 percent.

Table 7. Current Use Lands - 2001						
County	Total Land	Total Land Acres in				
	Acres	Current	Land in			
		Use	Current Use			
Belknap	257,726.3	135,710.52	52.7%			
Carroll	598,396.75	215,697.56	36.1%			
Cheshire	452,910.78	287,350.77	63.5%			
Coos	1,152,946.8	755,625.29	65.5%			
Grafton	1,096,323.54	479,390.38	43.7%			
Hillsborough	561,351.43	274,365.76	48.9%			
Merrimack	597,481.35	338,020.05	56.6%			
Rockingham	446,221.19	167,088.3	37.5%			
Strafford	235,092.87	119,997.75	51.0%			
Sullivan	344,219.13	237,515.43	69.0%			
NH TOTAL	5,742,660.14	3,010,741.80	52.4%			

Source: Department of Revenue Administration, Current Use Report 2001

Under New Hampshire's Current Use program landowners can also accept an additional 20 percent "recreation adjustment" to their taxes. This recreation adjustment lowers a landowner's tax burden by an additional 20 percent if the land is kept open to the public for traditional forms of recreation. As defined by RSA 79-A, the six traditional forms of recreation consist of skiing, snowshoeing, fishing, hunting, hiking, and nature observation. Access must be available year-round unless these activities are detrimental to crops on agricultural lands or active forestry operations.

Table 8 below summarizes the percentage of Current Use lands that received this recreational adjustment in 2001. Statewide, about 39 percent of Current Use lands receive the recreational adjustment. The percentages vary somewhat year to year, however the relative trends among counties have remained constant. Coos County is the only county that has a majority of its Current Use lands receiving the recreational adjustment (and therefore should legally be open to traditional public access).

Rockingham and Strafford counties have the lowest percentage of acres given the 20 percent recreational adjustment. While both counties have around between 37 and 50 percent of their available land under Current Use, less than 25 percent of these lands receive this additional 20 percent recreation discount. These numbers were even lower in 1997 and 1999. In both of these years, the Department of Revenue Administration reported that Strafford and Rockingham counties had only between 6 and 15 percent of their Current Use lands receiving the recreational adjustment. Landowners tend to own smaller parcels in the southern part of the state given the greater population density. With the smaller parcel size and greater population, landowners may be more concerned

about unwanted use or liability, or may fear their lands will be subject to too much public pressure.

Table 8. Current Use Lands with Recreational Adjustment							
County	Acres in Current Use	Acres with 20% Recreation Adjustment	Percentage of Current Use Acres Receiving Recreation Adjustment				
Belknap	135,710.52	48,449.56	36%				
Carroll	215,697.56	62,566.94	29%				
Cheshire	287,350.77	73,276.60	26%				
Coos	755,625.29	513,556.13	68%				
Grafton	479,390.38	169,624.63	35%				
Hillsborough	274,365.76	67,070.54	24%				
Merrimack	338,020.05	141,889.92	42%				
Rockingham	167,088.3	32,348.72	19%				
Strafford	119,997.75	21,391.22	18%				
Sullivan	237,515.43	76,867.99	23%				
NH TOTAL	3,010,741.80	1,207,042.25	39%				

Source: Department of Revenue Administration, Current Use Report 2001

State Lands

State lands are held and managed by several different State agencies. Some of the main agencies with lands open to recreational use include the Department of Resources and Economic Development, the Fish and Game Department, the Department of Environmental Services, and the Department of Transportation.

The Department of Resources and Economic Development (DRED) holds, or has an interest in, over 200,000 acres of public lands open to some level of recreational access. Lands held by DRED are identified as State Parks, State Forests, or Other Lands. Other Lands include State beaches, natural areas, wayside parks, historic sites, campgrounds and ski areas. Table 9 provides a breakdown by major category.

Table 9. DRED Lands and Reservations, 2002					
	Properties	Acres			
State Forests	117	90,258			
State Parks	41	68,022			
Other Lands (wayside parks, natural areas, state	63	43,233			
beaches, campgrounds, historic sites, ski areas)					
TOTAL DRED Lands and Reservations	221	201,513			

Source: Department of Resources and Economic Development (DRED), 2002

While it is useful to know if a parcel is identified as a State Park or State Forest, it may be more informative to understand how these lands are managed. DRED follows four basic use-based classifications. These classifications presented in Table 10 below,

include recreation lands, forestry lands, conservation easement lands, and agricultural lands

The majority of lands managed under DRED fall into the Forestry Lands category. These "Forestry Lands" support multiple uses and are not earmarked solely for recreational facilities. Only small portions (9,149 acres) of DRED's lands are actually managed specifically for recreation (i.e. developed recreation facilities, picnic areas, campsites, beaches, etc.), even though there are over 68,000 acres of land labeled as State Park land. This means that a majority of the acres held by DRED - Division of Parks and Recreation (State Parks) are managed for purposes other than solely developed recreation/tourism attractions.

Table 10. Department of Resources and Economic Development - Use Classifications

- **DRED owns 9,149 Acres of Recreation Lands**. Recreation Lands are defined as lands that have or plan to have developed recreation and/or administrative facilities or provide moderate to high tourist attraction or user interest and include those adjoining areas that are an integral part of the same. See **State Parks and Recreation** for more information.
- **DRED owns 145,906 Acres of Forestry Lands**. Forestry Lands are defined as lands that are not a part of a developed recreation or administrative area. These lands support multiple uses (e.g. forestry, hiking, snow-shoeing) not associated with developed recreation (e.g. picnic areas, developed camping).
- DRED holds a partial interest on 46,140 Acres of Conservation Easement Lands. Conservation Easement Lands are defined as privately-owned lands where partial interest has been deeded to the State for the purpose of protecting the land from development. These lands are often subject to public access rights (e.g. hiking, snow-shoeing, nature observation).
- **DRED owns 318 Acres of Agricultural Lands**. Agricultural Lands are defined as lands leased for agricultural purposes and which are eligible for taxation by local assessing officials as provided by **RSA 72:23-I(b)**, as amended.

Source: DRED, 2002

Fish and Game (NHFG). According to recent estimates, New Hampshire Fish and Game has responsibility or an interest in over 33,000 acres of land. This estimate includes both lands held in fee and easement. Looking more specifically at types of holdings, NHFG owns or manages 909 acres of boat or angling access sites, 10,166 acres of conservation easements, 4,240 acres of wetlands area, 17,107 acres of upland area, and 831 acres related to fish hatcheries

Department of Environmental Services (DES). The Dam Bureau within DES maintains 270 State-owned dams and 9,688 acres of property associated with many of these dams. There are over 55 public access sites at properties owned by DES. The department collaborates with towns, DRED, NHFG, the Department of Transportation, snowmobile clubs, private landowners, and other states to provide these public access

sites. Most facilities are low-impact, providing car-top/canoe access. Some of the uses of these access areas include boat launching, picnicking, snowmobiling, fishing, swimming, scenic viewing and conservation lands. The Bureau also provides assistance to dam owners and others to restore rivers to free-flowing conditions through selective dam removal. Dam removal eliminates barriers to fish and other aquatic species, and creates new, river-based recreational opportunities.

Department of Transportation (DOT). The DOT currently manages over 400 acres of recreation and conservation lands at 142 separate locations. Included are sites that the Department calls scenic easements, bike paths, scenic overlooks, roads to public waters, one park, and one trail. The one park is the 10-acre Hilton Park in Dover, providing a playground, picnic tables, baseball diamond, boat launch, and fishing. The Department also owns 21 scenic easements and overlooks, the biggest and most well known being the 70-acre Thirteen Mile Wood Scenic Easement in Cambridge, Dummer, and Errol along the Androscoggin River and Route 16.

State Park Needs

In the summer of 2002, the DRED - Division of Parks conducted a telephone survey of State Park Managers to assess the conditions and trends of the State's park system. A total of 55 managers and regional supervisors were interviewed across DRED's three park regions; East, North and West. The East Region includes parks within the Seacoast, as well as Ahern, Bear Brook and Pawtuckaway. The North Region includes parks in Coos County and the White Mountains, as well as Wentworth State Park and White Lake State Park. The West Region includes a range of parks in Cheshire, Sullivan, Hillsborough, and Grafton Counties such as Pillsbury, Pisgah, Monadnock and Sunapee.

The brief phone survey asked questions about State Park Managers' reported quality of state park facilities and the resource base, questions about the ability of the park to meet demand, and a report of the greatest needs at individual parks. The first questions required managers to rank their park's facility and resource base conditions based on a five-point scale; ranging from poor to excellent.

In all, 11 percent of park managers felt that the conditions of their State park facilities were poor. Facilities might include restrooms, parking, picnic areas, and the like. About 42 percent felt conditions were fair (rank of 2 on a five-point scale). Approximately 4 percent ranked facilities as excellent, 15 percent said conditions were very good, and the remainder, 27 percent, gave a middle rating of "good".

Managers in the East Region gave the lowest average rating. Approximately 18 percent rated their facilities as poor, and 53 percent rated facilities as fair. The remainder rated their facility conditions a mid-rating of "good". No one in the East Region gave facility conditions a rating of "very good" or "excellent".

On average, park managers rated the condition of the natural resource base slightly higher. In all, 13 percent rated the resource base quality as "very good" or "excellent", 46 percent rated the resource base as "good". About 26 percent rated the condition of the

resource base as fair and 9 percent gave a poor rating. Park managers in the West Region gave the highest average rating, with 70 percent giving their resource base at least a "good" rating, while 61 percent in the North Region and 44 percent in the East Region gave at least a "good" rating, respectively.

Park managers were then asked if the park they manage is currently able to meet existing recreational demand. Responses were split, with about half (48 percent) indicating demand was being met, half (48 percent) said demand exceeded supply, and 4 percent giving a conditional response.

Trails Inventory

The Office of State Planning completed the *Comprehensive Statewide Trails Study* in 1997, an update of the 1974 Trails Study, to address future trails needs, and establish a recreation-planning framework for trails. As part of this effort, general trail mileage estimates (as shown in Table 11) were developed for a range of activities. These figures were tabulated using a variety of sources, and reflect the State's best estimates of trail mileage.⁵

Table 11. 1997 Trails Inventory		
Trail Use	Estimated Mileage	
Snowmobiling	6,000	
Hiking	2,800	
Bicycle	1,090	
X-Country Ski	345	
Moto-Cross Bike ⁶	162	
Four Wheel Drive/ ATV	160	
Mountain Bicycle	159	
Barrier Free	74	
Equestrian	67	
Interpretive	33	
TOTAL	10,890	

Source: Comprehensive Statewide Trails Study (OSP, 1997)

Snowmobile trails, followed by hiking, make up the majority of trail mileage in the state. In comparing the 1997 data to the 1974 data, the Trails Study found that snowmobile trail mileage has tripled in that 23-year period and overall trail mileage has increased from 7,200 miles in 1974 to 10,890 miles in 1997. Overall trail use appears to be on the rise, at least as exemplified by trail use in the White Mountain National Forest (WMNF). US Forest Service Data indicates that there was a 23 percent increase in trail use in the WMNF between 1974 and 1995.

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⁵ While efforts were made to minimize double counting, a more detailed, updated trail inventory would be useful to better reflect the true availability of different trail opportunities across the state.

⁶ New figures, combining Moto-Cross Bike and Four Wheel Drive/ATV, estimate mileage at 400+.

Rail Trails. The DRED – Bureau of Trails manages about 300 miles of State-owned rail right-of-way under a cooperative agreement with the DOT Bureau of Rail and Transit. Since 1998, the Bureau of Trails, under this agreement, has managed abandoned State-owned lines for recreation purposes. While 300 miles are listed under this agreement, only portions of these have been resurfaced for trail purposes. Many miles still have ties and ballast, requiring snow cover for safe use⁷.

Bicycle Routes. The NH Department of Transportation (DOT) in conjunction with the Bicycle and Pedestrian Transportation Advisory Board and New Hampshire's Regional Planning Commissions recently produced a set of regional bicycle maps, one for each of New Hampshire's seven travel regions. These transportation maps provide information on both statewide and regional bicycle routes. This information is available on the web at DOT's Bicycle/Pedestrian Information Center or in hard copy.

Trails and Greenways. There are many different types of trail and greenway efforts underway in the state. Below are several main efforts in the state, though certainly not an exhaustive list. For instance there is the Monadnock Sunapee Greenway connecting Mt. Monadnock in Jaffrey, NH with Mt. Sunapee in Newbury, the evolving Wantastiquet-Monadnock Greenway linking Mt. Wantastiquet in Hinsdale with Mt. Monadnock in Jaffery and Rindge, as well as the Sunapee Ragged Kearsarge Greenway (SRKG). The SRK Greenway Coalition is working on two new linking trails that will expand their current 75-mile loop around Lake Sunapee.

Some trails not only link New Hampshire communities but also cross state lines. Beyond the well-known Appalachian Trail, some smaller interstate trails also include the Metacomet-Monadnock Trail and the Wapack Trail, both linking communities in other states to New Hampshire via foot trails. Another example includes the Cohos Trail up in the northernmost part of the state. This corridor travels from Bartlett up to the Canadian Border in Pittsburgh and is envisioned to connect with trails in Quebec.

The Heritage Trail, as envisioned, will be a 230-mile walking path, extending from Massachusetts to Canada, along the Merrimack, Pemigewasset and Connecticut Rivers. Individual community efforts are still underway formalizing the miles of trail that are part of the Heritage Trail system. Smaller river corridor trail systems include the Winnipesaukee River Trail from Center Harbor to Franklin, the Piscataquag River Trail in Manchester, Goffstown, New Boston, and the Souhegan River Trail in the towns of Merrimack, Amherst, Milford and Wilton.

Beyond hiking and pedestrian trails there are water trails as well. The Connecticut River Water Trail travels along full length of the Connecticut River in Vermont and New Hampshire. The Connecticut River Joint Commissions recently published a map and guidebook of this entire trail for boating enthusiasts.

⁷ A statewide rail-trail inventory depicting rail-trail ownership and condition would be helpful for determining the quality and usability of these rights-of way.

RECREATION DEMANDS AND NEEDS

National Facts and Figures

There are several nationwide studies, conducted on a regular basis, that help to frame recreational demand in the US. These studies are particularly helpful in identifying broad trends and understanding public attitudes. The following section provides a summary of nationwide statistics, and is presented to set a foundation for statewide information and data.

Since 1994, Roper-Starch Inc. has conducted a yearly national survey on recreation. This past year, the survey measured participation levels for outdoor recreation activities, assessed attitudes about outdoor recreation, and explored outdoor recreation's relationship to current issues of concern and the environment. This information, while not specifically focused on New Hampshire, provides general insights concerning recreation demand and need in the country and offers some information about trends.

According to this study, 66 percent of Americans engage in some type of outdoor recreation at least several times during an average month, while 78 percent engage in some type of outdoor recreation activity at least once a month. Participation in outdoor recreation seems to be increasing, both in terms of the number of participants and in how frequently they participate. This survey reported that 34 percent of Americans participated in outdoor recreation at least several times a week in 2000, as compared to 20 percent in 1998 and 15 percent in 1994.

Figure 4 shows that the percentage of people who engage in some kind of outdoor recreation activity at least once a month has increased as well. Over three-fourths (78 percent) of Americans participated in outdoor recreation at least once a month in 2000 as compared to one-half in 1994 (50 percent).

80% 60% 40% 20% 1994 1995 1996 1997 1998 1999 2000

Figure 4. Outdoor Recreation Participation: At Least Once a Month

Source: Roper Starch Worldwide Inc., Outdoor Recreation in America 2000

Importantly, these trends appear consistent across age and income levels. Comparing 1999 to 2000, Roper Starch Inc. reported that all age groupings reported higher participation rates. Namely, monthly participation among 18-29 year olds increased from 77 percent to 86 percent and from 73 to 86 percent among 30-44 year olds. Even the grouping of 60 + year olds increased outdoor recreation participation from 48 percent to 62 percent. Participation also increased across income levels. Using 1994 as a benchmark, participation in outdoor recreation (at least once a month) increased among low-income Americans (under \$15,000 a year) from 37 percent up to 65 percent, as well as among those with higher incomes (above \$50,000 a year), from 65 percent up to 89 percent.

In terms of activity preferences, this survey reported rigorous walking was the most popular activity reported in 2000. Sixty-two percent of Americans participated in some kind of rigorous walking, be it hiking or walking for fitness/recreation. Other popular activities include swimming (39 percent), picnicking (36 percent), viewing wildlife (25 percent) and road biking (23 percent).

Comparing this data with another major national survey provides a more complete assessment of general recreational demand and trends in participation. The widely cited National Survey on Recreation and the Environment (NSRE) provides a detailed and comprehensive study of nationwide recreational demand. This study has been conducted periodically over the last 40 years, with data from the 1960s up to the present day. The last full study was completed in 1994, but an updated version (NSRE 2000) is again underway. While a complete report of NSRE 2000 is not yet available, several smaller reports, providing updated demand information on a host of activities, are available and have been used here along with information from the 1994 and 1983 studies.

According to the 1994 NSRE survey, almost 95 percent of Americans had participated in at least one of the 80 surveyed forms of recreation (within the preceding 12 months). The most popular activities include walking, visiting a beach or other waterside, gathering outdoors with family and friends, and sightseeing. The popularity of these activities can be attributed to the fact that all are relatively low cost, do not require specialized equipment or settings (e.g. rock-climbing), and can often be participated in close to home.

Table 12 provides a comparison of participation rates between 1994 and 2000 for 16 different activities. Data indicates that participation rates have increased or remained stable for most activities. Walking for exercise/pleasure remained the most common activity and has actually increased in popularity over that six-year period. This survey reports that 83 percent of Americans ages 16 or older have walked for exercise/pleasure as compared to 67 percent in 1994. Wildlife viewing/photography, bicycling, and day hiking have all shown an increase in participation by about 10 percent or more.

Table 12. Nationwide Participation Rates in 1994 and 2000

Selected findings from NSRE 2000 and	Percent of Americans	
1994	16 years of age or older	
	who participate	
SELECTED ACTIVITIES	2000	1994
Walking for Exercise/Pleasure	83.3%	66.7%
Swimming (lake, river, ocean)	42.1%	39%
View, identify, photograph other wildlife	44.7%	31.2%
Bicycling	39%	28.7%
Day Hiking	33.2%	23.9%
View, identify, photograph birds	32.5%	27%
Fishing (freshwater)	29.4%	24.4%
Camp at developed sites	26.2%	20.7%
Motor-boating	24.6%	23.4%
Outdoor Team Sport	22.9%	26.4%
Drive off Road for recreation	17.5%	13.9%
Camp at Primitive Site	15.9%	14%
Hunting	11.4%	9.3%
Horseback Riding	9.8%	7.1%
Downhill skiing	8.5%	8.4%
Snowmobiling	5.6%	3.6%

Sources: National Survey on Recreation and the Environment (NSRE), 2000 (Versions 1-8); National Survey on Recreation and the Environment (NSRE), 1997.

Participation Trends 1982-1994

To give a more historical context to recreation participation, researchers have examined a wide range of activities and identified trends in participation. In this study, participation is evaluated by millions of Americans who participate as well as by percentage of population who participate. Reporting on numbers instead of percentages provides a better look at overall demand because it takes population growth into consideration.

The data shows that participation (reported by millions of Americans) went up for most activities between 1982 and 1994. In all, 25 of the 31 activities compared in the two surveys showed an increase. However, even if participation rates decline slightly or stay consistent, the sheer number of people participating will rise due to population gains. This means that overall, there is more demand, as defined by numbers of participants, for most recreation activities now than there was 20 years ago. So even if the percentage of people who participate in boating stays the same, there are still millions of additional participants enjoying the activity because of population growth.

The activities with the highest average increase in millions of Americans participating include bird watching, hiking, downhill skiing, primitive area camping, walking and swimming. The only activities that showed an actual decrease in millions of Americans who participated (between 1982-1994) were hunting, fishing, sailing, tennis, horseback riding, and ice-skating, though many of these activities seem to be stabilizing according to the 2000 data.

Overall participation rates can be modified by several factors including age, gender, income and education. For most activities, participation rates decline with age, increase with income (up to a certain level) and education, and increase with average household size. Males often have higher participation rates than females, and Caucasians tend to have higher participation rates for most activities than other racial or minority groups.

These modifiers are certainly oversimplifications and, as always, there are some exceptions. Using outdoor team sports as an example, males are more likely to compete in outdoor team sports than females, and those who are 16 to 24 years old are far more likely to participate than older generations. Interestingly, however, as education increases participation in outdoor team sports decreases.

Several other trends of interest include the following:

- Participation in fitness activities is high for both men and women, and across age and income levels. Almost 50 percent of people over 60 years old say they walk outdoors for recreation or exercise.
- Participation in all boating increases with income levels and increases as the number of people in the household increases.
- Until a person reaches age 60, the likelihood of participation in hunting or fishing declines only slightly.
- Participation in non-motorized boating declines steadily with age, but participation in motor boating remains quite high for those over 50.

Participation in the Northeast United States

Beyond nationwide estimates, the National Survey on Recreation and the Environment divided the 1994 data by area to draw general comparisons across four broad regions of the US This regionalized data, though not as definitive as statewide data, does give additional context to nation-wide participation rates. This analysis broke the US into four major regions; the Northeast, Midwest, South and West. The Northeast region ranges from New Jersey and Pennsylvania up through Maine, and includes New Hampshire. Thirteen groups of activities were compared across the four regions. For some activities participation was similar across regions, for others there were regional variations. Some of the findings directly related to the Northeast include the following:

- Participation in team sports is slightly higher in the Northeast than the other three regions.
- Participation in snow and ice activities is higher in the Northeast than the other three regions.
- Participation in camping is lower in the Northeast than in the West.
- Participation in hunting and fishing is lower in the Northeast than the other three regions.
- Participation in swimming is higher in the Northeast than the other three regions.

New Hampshire Statistics

The 2001 National Survey on Fishing, Hunting and Wildlife-Associated Recreation provides national and statewide level data for several wildlife related activities. A preliminary report summarizing New Hampshire data is now available through the US Fish and Wildlife Service and is summarized below. A final report for New Hampshire is expected in 2003.

These national and statewide surveys provide data about New Hampshire residents, as well as data about the state itself. Specifically, data is available on the level of participation and expenditures by New Hampshire residents within the entire United States, and on the levels of participation and expenditures by residents and non-residents alike within the state of New Hampshire. Summarized below are participation rates for New Hampshire residents and participation totals and expenditures within the state of New Hampshire by residents and non-residents.

In all, this 2001 survey found that 53 percent of New Hampshire residents, who are 16 years old or older, participated in hunting, fishing, and/or wildlife watching activities. About 47 percent of residents take part in wildlife watching (observing, feeding, or photographing wildlife) and 18 percent take part in either fishing or hunting.

Using 2001 data, wildlife-associated recreation contributed \$619 million in expenditures within New Hampshire. This includes expenditures for fishing, hunting, items used for both fishing and hunting, and lastly, wildlife watching. Equipment purchases accounted for \$308 million, licenses, leases, landownership and contributions accounted for \$42 million, and trip related expenditures accounted for the remainder of \$269 million.

New Hampshire saw a total of 267,000 anglers in 2001. Combined, these anglers fished for 3.2 million days and spent nearly \$165 million on fishing related expenditures in the state. About 55 percent of all anglers in New Hampshire are residents and about 45 percent are non-residents, though residents account for over 81 percent of all fishing days. The average angler fished 12 days a year, and spent a total of \$618 a year in angling related expenses.

New Hampshire saw a total of 78,000 hunters in 2001. Combined, these in-state and out-of-state hunters participated in 1.46 million days of hunting and spent over \$71 million in hunting related expenses in-state. About 67 percent of all hunters who hunt in New Hampshire are state residents. Approximately 18,000, or 33 percent of the total, are non-resident hunters. However, non-residents accounted for only 22 percent of all hunting days in New Hampshire in 2001. The average participant hunted 18.7 days.

New Hampshire saw a total of 766,000 participants in wildlife watching activities in 2001. Nonresidential participation, defined as at least one mile or more from home, consisted of 425,000 participants. Of this "nonresidential" grouping, 105,000 were state residents and 320,000 are from out-of-state. Residential participation, defined as being less than one mile away from home, consisted of 445,000 participants. Wildlife watching

contributed nearly \$343 million in expenditures in New Hampshire. Breaking this down, approximately \$177 million was spent on trip related expenditures, over \$148 million was spent on equipment, and over \$17 million was spent on "other" expenses such as membership dues, contributions and magazine subscriptions.

Wildlife-Related Recreation Trends. The 2001 version of this dataset can be compared against 1996 data. In comparing broad estimates from both studies, it appears there was little change in participation for fishing, a slight decrease in hunting, and a similar number of total participants in nonresidential (travel 1 mile or more) wildlife watching. However of these non-residential wildlife watchers, 258,000 were estimated to be from out-of-state in the 1996 study and 320,000 were estimated to be from out-of-state in the 2001 study. Residential (within a mile of home) wildlife watching showed an increase. Fishing expenditures decreased in this five-year period, where as hunting expenditures increased slightly and wildlife watching expenditures increased from a total of \$282 million up to \$343 million.

Statewide Recreational Demand

Since the last SCORP was completed in 1994, two public opinion surveys were undertaken related to outdoor recreation in New Hampshire. Both were completed through the University of New Hampshire (UNH) and provide much more detailed figures on participation than had ever before been available in the state.

The first study, 1997 Statewide Outdoor Recreation Needs Assessment, completed by UNH for the Office of State Planning, consisted of a statewide assessment of recreation in New Hampshire. This assessment provides baseline information on household participation rates for 60 different types of recreational activities, as well as attitudes about spending priorities, major recreational issues, and reasons for participating. A summary report, with details about response rates, data design, and data results can be found in **Appendix A**.

Participation. The activities listed in Table 13 below offer a snapshot of household participation and frequency of participation. This data provides baseline information that future studies can build upon to better understand trends and changes in participation rates over time⁸

⁸ In preparation for the ensuing SCORP report in 2008, a follow-up statewide or regional outdoor recreation demand and need assessment should be conducted to identify trends and changing attitudes.

Table 13. New Hampshire Participation Rates and Frequency of Participation						
	Overall	Percent who	Percent who			
	Household	participate 1-6	participate 7 +			
	Participation	times a year	times a year			
Wildlife Observation	85%	35%	50%			
Driving for Pleasure	84%	32%	52%			
Sight-seeing	84%	45%	39%			
Jogging/Running/Walking	79%	17%	62%			
Day Hiking	73%	48%	25%			
Stream/Lake Swimming	71%	37%	34%			
Picnicking	68%	49%	19%			
Photography	64%	37%	27%			
Ocean Swimming	58%	40%	18%			
Bicycling	55%	29%	26%			
Outdoor Pool Swimming	54%	26%	28%			
Freshwater Fishing	50%	23%	27%			
Nature Study	47%	33%	14%			
Canoeing/kayaking/rowing	45%	33%	12%			
Motor-boating	43%	23%	20%			
Playing on playgrounds	40%	20%	20%			
Tennis/Volleyball/Golf	37%	16%	21%			
Baseball/basketball/soccer	36%	14%	22%			
Downhill Skiing	35%	17%	18%			
Camping in National Forest	33%	30%	3%			
Camping at State Parks	31%	26%	5%			
Cross-country skiing	31%	20%	11%			
Backpacking	29%	24%	5%			
Camping at Private Campground	28%	21%	7%			
Mountain biking	27%	15%	12%			
Large Game Hunting	25%	10%	15%			
Off-road Vehicle Driving	21%	13%	8%			
Snowshoeing	20%	13%	7%			
Snowmobiling	19%	9%	10%			
ATV	17%	6%	11%			
Bird Hunting	17%	9%	8%			
Water-skiing	17%	11%	6%			
Horseback Riding	15%	10%	5%			
Sailing	14%	10%	4%			
Sea Kayaking	4%	3%	1%			

Source: 1997 NH Outdoor Recreation Needs Assessment (UNH)

According to this statewide study, many of the most popular activities in New Hampshire are similar to those identified in nationwide studies. Wildlife observation, driving for pleasure, sightseeing, and jogging/running/walking are extremely popular activities. Additionally, these activities show the highest frequency of participation. For instance, 79 percent of households participated in jogging/running/walking activities in the previous year, and 62 percent of households had done so at least seven or more times that year. Taking another example, 71 percent of households had gone swimming in a stream or lake in the previous year. Breaking this down further, about 34 percent participated 7seven or more times a year, and 37 percent had participated one to six times a year.

This study suggests that day hiking may be more popular in New Hampshire than nationally. Seventy three (73) percent of New Hampshire households went day hiking in the previous year. A full 25 percent of all households had done so 7 or more times that year.

Spending Priorities. Another section of the survey asked respondents to rank comparatively how future monies should be spent on a range of outdoor recreation and conservation programs and projects. The programs/projects had to be ranked as either a low, moderate, or high priority, with the understanding that funding is limited so if some programs are ranked high, others must be ranked lower.

Programs related directly to protecting the resource base tended to receive the highest average ranking of the list of 20 plus programs. About 82 percent considered the protection or improvement of water quality in rivers, streams, lakes, and ponds a "high" priority. Nearly 57 percent of respondents said that preservation or restoration of native wildlife should be given a "high" priority. Almost 40 percent gave the acquisition of lands for conservation, open space or habitat protection a "high" priority ranking. Other programs that received the greatest average of "high" ratings included enforcement of environmental laws (44 percent) and wetland preservation/protection programs (38 percent).

Several questions looked specifically at priorities for providing, improving or adding additional types of recreation opportunities. While these, in general, received lower average rankings than many of the resource protection programs, some insights can be gained from considering these recreational programs relative to one another.

Table 14 shows that improved maintenance of existing park facilities received a higher average ranking than providing additional facilities for outdoor recreation sports or the construction of more multi-purpose trail systems. This gives some public support for maintaining opportunities that exist over solely expanding and creating new opportunities. About 28 percent of state residents ranked insuring access to the state's public waters a high priority. Though this does not provide data on what type of access is desired, residents do feel it is important, in principle, that these waters are made accessible. Residents gave a similar priority ranking to providing wildlife viewing areas, expanding multi-purpose trail systems, and providing incentives to encourage recreation on private timber lands.

Table 14. Perceived Spending Priorities for Outdoor Recreation						
	Low	Moderate	High			
	Priority	Priority	Priority			
Ensure access to NH's public waters	24%	48%	28%			
Improved maintenance of existing park	15%	61%	24%			
facilities						
Wildlife viewing areas	37%	46%	17%			
Construction of more multi-purpose trail	40%	46%	14%			
systems						
Incentives to encourage the provision of	46%	40%	14%			
outdoor recreation opportunities on private						
timber lands						
Provide more facilities for outdoor recreation	64%	27%	9%			
sports and activities (golf, baseball, tennis)						
I			1			

Source: 1997 NH Outdoor Recreation Needs Assessment (UNH)

Management Objectives. Another section asked respondents to rank the importance of a variety of conservation and recreation-related management objectives. Similar to funding priorities, management objectives related to protecting New Hampshire's resources received the highest average ranking. Examples include protecting drinking water, native plants/animals, and protecting natural areas from development.

Five questions centered either on recreation or tourism related objectives. Table 15 provides a breakdown by three collapsed levels of importance. In general, a majority of residents felt that providing non-motorized recreation opportunities was of high importance. About 61 percent indicated that providing non-motorized recreation was either very or most important, compared to about 21 percent who felt motorized recreation very or most important, and about 19 percent who felt that opportunities requiring a high level of development were very or most important. Only 7.5 percent of all respondents said that providing for non-motorized recreation was either not important or only of minor importance. This compares to about 53 percent for motorized recreation and 53 percent for recreation that requires a high level of development.

Table 15. Importance of Selected Recreation-related Management Objectives					
	Not/Minor Important V		Very/Most		
	Important		Important		
To provide opportunities for non-motorized recreation	7%	32%	61%		
To attract tourists to New Hampshire	30%	31%	39%		
To provide opportunities for motorized outdoor recreation	53%	26%	21%		
To provide a source of revenue for the owners or managers of natural and cultural resources	41%	39%	20%		
To provide the opportunity for outdoor recreation activities which require a high level of development	53%	28%	19%		

Source: 1997 NH Outdoor Recreation Needs Assessment (UNH)

These figures should not be interpreted to mean that motorized recreation or developed recreation opportunities are completely unimportant and consequently should not be given any consideration. Rather it suggests that a broader range of residents participate in non-motorized recreation and accordingly, a larger percentage feel it is important to maintain these opportunities. Keep in mind that many who participate in activities that require development (e.g. golf, skiing) or motorized activities (e.g. wheeled off-highway recreation vehicle, snowmobile) also enjoy hiking, canoeing and other non-motorized activities. Non-motorized recreation, especially walking/hiking, can be enjoyed without a great deal of equipment or investment. And, as borne out by national and statewide data, these activities tend to have the highest participation rates.

With this in mind, this information suggests that non-motorized activities should continue to be a major focus in New Hampshire's outdoor recreation management. In addition, while overall statewide participation rates tend to be lower for motorized or developed recreation, those who do participate tend to participate quite often and their needs cannot be disregarded. A considerable percentage of state residents (~ 20 percent) feel that developed recreation and motorized recreation, respectively, are a very or the most important recreational management objective.

Regional Considerations. Further analysis of this data conducted by the University of New Hampshire suggests that differences exist between residents depending on where they live in the state and by how long they have lived here. In this analysis, several different groups were identified. To examine differences between those who have lived in New Hampshire all of their lives versus those who have moved here, groups were developed for New Hampshire 'natives' and New Hampshire 'non-natives'. In addition, responses were also analyzed by classifying respondents as where to they live in the state. The two categories that were developed consisted of 'metro' and 'non-metro'.

This metro/non-metro classification considers the southeastern area of Merrimack, Hillsborough, Strafford and Rockingham Counties as the "metro" area, and Coos, Carroll, Belknap, Grafton, Sullivan and Cheshire Counties as the "non-metro" area. This division was derived based on an examination of average population per square mile. The four-county "metro" area contains 73 percent of the state's population and occupies 32 percent of the land base. The average population per square mile is 313.25. The six-county "non-metro" area occupies 68 percent of the land base but only 27 percent of the population with an average population per square mile of 69.16. This basic classification provides an interesting, albeit rough, starting point for examining potential differences between different parts of the state.

Responses for natives and non-natives, as well as metro areas and non-metro areas, were compared across several classes of outdoor recreation activities. Responses were also examined across motivations for participation and across attitudes about recreation management and the environment. Below is a summary of some recreation participation

and attitudinal differences between native and non-native classifications, as well as between the two metro/non metro classifications.

- Natives have higher participation rates than non-natives for several different outdoor recreational activities including hunting, fishing, motor sports, activities that require developed settings, and active pursuits (e.g. such as swimming, jogging, hiking, rock climbing, etc.).
- Non-metro respondents (Coos, Belknap, Grafton, Carroll Counties) have higher participation rates in hunting than metro respondents.
- Motivations for participation in outdoor recreation are generally the same for natives and non-natives. However, non-metro respondents who have moved to New Hampshire since the 1970's were more motivated to participate in recreation as an 'escape' than were natives.
- Non-metro respondents tend to have stronger preferences for management objectives related to environmental protection than those from metro areas. Native respondents from non-metro areas were an exception.
- Non-natives consider wetland protection more of a funding priority than natives.
- Natives are more supportive of higher fees for non-residents than are non-native residents, but are the least supportive of higher in-state fees to support outdoor recreation management/development.
- Non-metro residents, in general, tend to be less supportive of higher fees than metro residents.

Demand for Water Access

Overview. In 1997, the University of New Hampshire completed a statewide assessment for the New Hampshire Fish and Game Department to examine the need and demand for public access to lakes, ponds and rivers in the state. This study provides baseline statistics about what lakes, ponds and rivers people go to, what they like to do, and general attitudes about public access needs in the state.

Data in the telephone survey portion of the study was collected so that statistically significant comparisons could be drawn across four major regions of the state. The regions represent the four New Hampshire Fish and Game Department management regions and are drawn along county lines. As illustrated by Figure 5, Region 1 consists of Coos County, Region 2 consists of Belknap, Grafton and Carroll Counties, Region 3 Consists of Rockingham, Strafford and Merrimack Counties and Region 4 consists of Hillsborough, Cheshire and Sullivan Counties.



Figure 5. NH Fish and Game Management Regions

Participation. Overall, this survey found that 66 percent of households participated in an outdoor activity on a lake, pond or river in New Hampshire within the previous 12 months. Those who did not participate indicated a lack of time or money as the most important reasons for not participating. Households in Region 2 (Belknap, Grafton, Carroll Counties) had higher overall participation rates (72 percent) than the rest of the state. This is not surprising given the substantial surface water resources available in this region of the state.

Figure 6 provides a sampling of statewide household participation for a range of waterrelated activities. Of those activities specifically explored in this study, fishing from shore was the most popular, followed by motor boating, canoeing, and fishing from a boat.

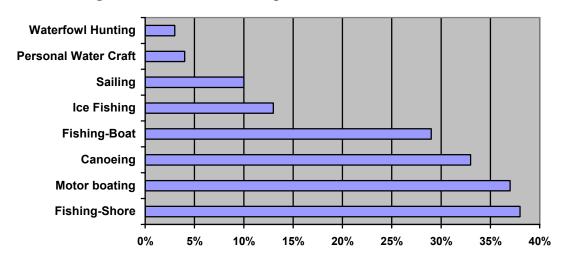


Figure 6. Household Participation in Water-Based Activities

Source: NH Public Access Needs Assessment - Statewide Summary Report (UNH, 1997)⁹

Regional comparisons show that participation rates for several water-based activities varied within the state.

- Residents in Region 1 (Coos County) are more active in ice fishing and fishing from shore than residents of other parts of the state.
- Residents in Region 2 (Grafton, Belknap, Carroll Counties) are more likely to participate in motor boating, canoeing and sailing than residents in other parts of the state.
- Residents in Region 3 and Region 4 (southern counties) show similar overall participation patterns.

Visitation. Survey respondents were also asked to list the water body their household uses most often. Table 16 presents the most visited lakes, ponds and rivers on a statewide level. Lake Winnipesaukee, not surprisingly, was the most popular destination listed statewide. Only residents in Coos County (Region 1) had higher demand for other locations. For these residents, the Connecticut River was most popular followed by the Androscoggin River, Lake Umbagog, Forest Lake and, finally Lake Winnipesaukee.

Table 16. Most Visited Lakes, Ponds and Rivers in NH

- Lake Winnipesaukee
- Lake Sunapee
- Merrimack River
- Connecticut River
- Winnisquam Lake
- Newfound Lake
- Lake Pawtuckaway
- Squam Lake
- Lake Massabesic

37

⁹ Swimming was not explicitly studied in this project. The study's purpose was to provide the New Hampshire Fish and Game Department with data for estimating boating, fishing and hunting preferences.

By far, (65 percent) the most popular reason respondents gave for visiting an area most often was that it is close to home/relatives or near someone they knew with access. Only seven percent of respondents visited their favorite area because of nice scenery or clean water, respectively. As with many land-based activities, convenience is a key to participation.

Another question asked respondents if there were specific locations they would like to visit but did not because of problems with access. Lake Winnipesaukee was identified most often in each of the four regions. In Coos County (Region 1) Lake Winnipesuakee and Connecticut River were listed most often, followed by Lake Umbagog, Big Diamond Pond and Phillips Pond. In Region 2 (Belknap, Carroll and Grafton Counties) Lake Winnipesaukee, and Squam Lake were mentioned most often. In Region 3 (Strafford, Merrimack and Rockingham Counties) Lake Winnipesaukee was again listed most often followed by the Merrimack River and Squam Lake. In Region 4 (Cheshire, Sullivan and Hillsborough Counties) Lake Winnipesaukee was listed most frequently followed by the Merrimack River and Lake Sunapee.

Attitudes. Overall, a majority of state residents view public access issues as being important or extremely important. Sixty-eight (68) percent of residents feel that the decisions the State makes about public access issues are important or extremely important. Respondents (Figure 7) were also asked if New Hampshire needs additional access to lakes, ponds, and rivers. About 44 percent of respondents indicated that New Hampshire needed additional access. This compares with 34 percent who did not want additional access and 22 percent who did not know.

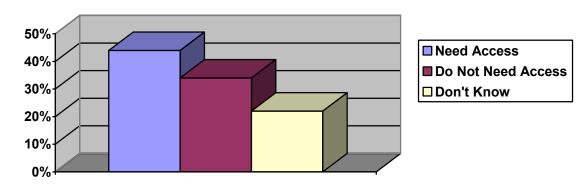


Figure 7. Does NH Need Additional Water Access?

Source: NH Public Access Needs Assessment - Statewide Summary Report (UNH, 1997)

In examining regional variations, residents in Region 1 and Region 2 were less likely to state that New Hampshire needs additional access as compared to those in Region 3 or Region 4. Over 42 percent in Regions 1 and 2, respectively, indicated that there was no need for additional types of access facilities as compared with 34 percent in Region 3 and

only 29 percent in Region 4. This is significant because Region 3 and 4, together, make up a majority of the state's population. Managers may want to consider developing opportunities for access in the southern part of the state to provide additional opportunities near the larger population bases.

Respondents were then asked which type of access should be given priority. Figure 8 shows that 43 percent did not know or felt no priority should be given. Thirty-one (31) percent felt walk-in sites should be given priority, while only 15 percent chose boat launches and 11 percent chose canoe/car-top access, respectively.

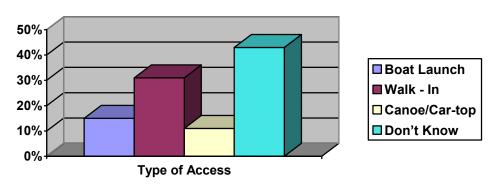


Figure 8. What Type of Access Should Be Given Priority?

Source: NH Public Access Needs Assessment - Statewide Summary Report (UNH, 1997)

About 51 percent of those who participated in the telephone survey also completed a more detailed follow-up mail questionnaire. Since this group is self-selected, the information that follows does not necessarily represent the 'general public'. However, these findings do provide a good indicator of the viewpoints and attitudes of those residents who tend to be more active or more experienced with water-based recreation. This group, given their interest in the survey, may represent a population that is comparatively more interested in the decisions the State makes about water-based recreation in New Hampshire.

Mail survey respondents were asked to rate the importance of different lake or river characteristics as part of their recreational experience. Overall, the most important characteristics relate to safety and the natural character of an area. Over 70 percent of this sample indicated that having a safe area for recreation was extremely or very important. Other highly important characteristics include the presence of wildlife and birds as well as undeveloped shorelines and natural features.

The most common recreational activities include picnicking, sunbathing, swimming, relaxing/doing nothing, and walking or hiking along shore. Again, these figures support other studies that report on the high popularity of activities that require little equipment, can take place in many locations, and can be participated in by young and old alike.

Respondents were asked to identify their priorities for improving water-based or water-enhanced (e.g. sunbathing, walking/hiking along shore) recreation in the state. A series of nine potential priorities were ranked. The top three priorities, according to this group, include improved information, better design and maintenance of existing facilities, and improved enforcement at public access sites. The lowest priorities within these nine categories centered on building additional types of public access facilities. The lowest ranking was given to building more fishing piers, followed by canoe/car-top facilities, boat launch facilities and shore bank-fishing opportunities. This data suggests that the NH Fish and Game Department's continued focus on refurbishing existing access sites is a good management strategy. Again, residents recognize the importance of providing quality experiences at existing sites, not just expanding on the overall quantity of sites.

When asked about the severity of different management problems on lakes, ponds and rivers in the state, respondents reported that excessive horsepower of powerboats, inconsiderate behavior of others, and human waste were some of the most serious problems based on their experience. Other issues reported most often as "moderate problems" included pollution caused by outboard motors and lack of enforcement of boating rules and regulations.

Another series of questions focused on viewpoints about several public access issues and concerns. One set of issues centered on people-related concerns. Almost two-thirds of respondents agreed that litter is a problem at most access sites. About 54 percent consider public safety to be a concern at boat launch facilities, and nearly 50 percent of respondents felt that there should be more supervision and security at public access sites. These responses add weight to the high priority given for better enforcement at public access sites.

Another trio of questions helped to frame public perceptions concerning the use of a lake, pond or river alongside this use's potential impacts on the resource base. Sixty five (65) percent agreed that water quality is risked when a water body is opened up to more access by the public. A slightly higher number (68 percent) of respondents said that protecting water quality is more important than providing the public with additional opportunities for water-based recreation. Fifty-eight (58) percent agree that New Hampshire will lose the natural quality of some lakes, ponds and rivers if more water access is developed. Again, many recreationists consider the impacts of additional access and are interested in efforts aimed at protecting the quality of the experience.

New Hampshire Licenses and Registrations

Fish and Hunting Licenses. National surveys indicate that participation in fishing and hunting has remained relatively constant or has decreased slightly in the last decade. New Hampshire license figures (Table 17) support this general trend. In general both instate and out-of-state fishing permit numbers have remained fairly constant in the past 10 years, while hunting permits have decreased slightly as have resident combination licenses. While these numbers do not provide any information about the frequency of

participation (how many days a year), it appears that the total number of anglers and hunters is not increasing over the years.

Table 17. Fishing, Hunting and Combo Licenses in New Hampshire							
	1991	1993	1995	1997	1999	2001	
Resident Fishing	71,226	68,180	72,509	74,771	76,175	74,449	
Non Resident Fishing	22,757	23,260	24,213	23,710	23,571	23,864	
Resident Hunting	25,936	26,421	25,095	24,053	23,416	21,638	
Non Resident Hunting	9,641	9,935	9,973	9,785	10,347	8,799	
Resident Combo	39,576	38,647	36,957	35,503	34,694	32,192	
Non Resident Combo	N/A	N/A	31	1,270	1,548	1,590	
TOTAL	169,136	166,443	168,778	169,751	169,751	162,532	

Source: NH Fish and Game Department Files, 2002

Boating Registrations. Boating registrations in New Hampshire, on the other hand, have increased substantially in the last four decades. Figure 9 shows that while numbers remained somewhat steady in the 1960's and 1970's, registrations have increased sharply in more recent years. New Hampshire reported approximately 39,000 boat registrations in 1980. This figure rose to almost 98,000 in 2000. Registrations doubled between 1980 and 1990 alone, and have increased over 19 percent between 1990 and 2000. These demand trends support continued emphasis on access-site maintenance, enforcement, improved boater information and education as highlighted by respondents to the 1997 Public Access to Lakes, Ponds and Rivers survey, as well as continued efforts to create additional water access.

100000 80000 40000 20000 1961 1970 1980 1985 1990 1995 2000

Figure 9. Boating Registrations in New Hampshire

Source: Department of Safety, Division of Motor Vehicles. 2002

Snowmobile and Wheeled Vehicle Registrations. Table 18 shows that New Hampshire has also seen a growth in snowmobile and wheeled vehicle registrations. There were approximately 43,000 snowmobile registrations sold in 1995/96 and 1996/97, respectively, and about 54,000 registrations sold this past 2001/02 season. While some variation exists year to year because of differing snow conditions, it is clear that registrations are on the rise and that most of this increase is due to out-of-state use.

Wheeled vehicle registrations have increased significantly in the last seven seasons. The New Hampshire Fish and Game Department reported over 10,500 in-state registrations and 1,362 out-of-state registrations in 1995/96. This figure rose to almost 21,000 in-state registrations and 4,670 out-of-state registrations in 2001/02. In-state registrations have almost doubled over this seven-year time period and the out-of-state registrations have more than tripled. This increase will command continued or expanded attention from resource managers as popularity and demand for motorized trails increase.

Table 18. Wheeled Off Highway Vehicle and Snowmobile Registrations							
	RESIDENT NON-RESIDENT						
	Snowmobile	Wheeled	Snowmobile	Wheeled			
		Vehicle		Vehicle			
1995/96	34,468	10,556	8,824	1,362			
1996/97	32,900	13,005	9,422	1,675			
1997/98	36,723	10,054	14,101	1,738			
1998/99	36,406	11,015	13,056	1,888			
1999/2000	39,391	14,717	15,320	2,714			
2000/2001	46,686	18,744	18,835	3,656			
2001/2002	36,294	20,973	18,363	4,670			

Source: NH Fish and Game Department Files, 2002

Travel and Tourism

Statewide Figures. Tourism represents one of the main sectors of the state's economy. According to the *Travel Economics Report (FY2000)* prepared for the DRED - Division of Travel and Tourism Development by the Institute for New Hampshire Studies, the travel and tourism industry ranks only behind retail trade in employment and is the second leading export activity after manufacturing. From July 1999 to July 2000, there were over 26 million visitor trips to New Hampshire. About 38 percent took place in the summer months, 26 percent in the fall, 20 percent in the spring, and the remainder (about 15 percent) in the winter. About 40 percent of spending occurred in the summer, 24 percent in the fall, 19 percent in the winter and 17 percent in the spring.

Direct spending by travelers and tourists represented 7.9 percent of the Gross State Product in 2000. Recreation spending alone represented 15 percent of direct spending, eating and drinking represented another 25 percent, and lodgings another 13 percent.

Total direct and indirect spending rose to \$5.2 billion, representing a 13 percent increase from 1998 to 2000. Tourism employment figures for the past 12 years indicate an upward, generally positive trend. Tourism employment has increased from 56,453 in 1988 to 68,774 in 2000. Much of this growth has taken place during the last few years.

Another recent report (*NH Visitors, Spring 2001 through Winter 2001-02*) from the Institute for New Hampshire Studies surveyed destination or overnight visitors to New Hampshire. This study found that, on average, 38 percent of destination or overnight visitors to New Hampshire are from Massachusetts. This compares to 14 percent of overnight or destination travelers who identified themselves as New Hampshire residents.

When asked the most important purpose for their trip, 31 percent of respondents indicated, "to visit friends or relatives". However, the second most important reason was for outdoor recreation (22 percent). This was especially important for summer and winter travelers. Respondents were also asked about the activities they participated in while on their trip. Shopping was listed as the top reason, followed by outdoor activities (27 percent), visiting national/state parks (12 percent), and visiting beaches (nine percent). Historic places, skiing, golfing and tennis, and theme/amusement parks were also mentioned by at least five percent of respondents. In general most of the activities mentioned, besides shopping, relate directly to the outdoor environment. Clearly the ability to participate in outdoor recreation is of prime importance to New Hampshire visitors.

Relationship to Open Space. A 1999 study by Economic Systems Group for the Society for the Protection of New Hampshire Forests (SPNHF) examined the economic impacts of open space on the New Hampshire economy. Open space was identified as a fundamental aspect for four major sectors: agriculture, forestry, tourism/recreation, and vacation homes. In all, this report found that 54 percent of direct spending on tourism and recreation was attributed to open space. According to 1996/7 figures, this constituted \$1.7 billion of \$3.2 billion in direct spending on travel and tourism. Spending related to second homes used primarily for vacation or recreational use was 100 percent attributed to open space.

State Parks. Visitation to State Parks in New Hampshire also underscores the importance and growing popularity of outdoor recreation in the state for residents and visitors alike. Figure 10 below provides a summary of visitation trends to New Hampshire's State Park system. State Parks have seen an increase in reported attendance. Estimated use was reported at 3.68 million in 1998 and 6.69 million in 2001¹⁰. The vast majority of this increase is due to reported increases in day use and better reporting in day use. As demand continues to increase, the impacts on developed park facilities and the natural/cultural resource base may also increase, adding further credence to increased focus on major renovations and refurbishments.

¹⁰ Figures reported in 1999, 2001, and 2002 *Annual Information Exchange*, published by the National Association of State Park Directors.

New Hampshire State Parks are self-funded, operating off of receipts rather than State General Funds. This was formalized when the Legislature established the State Park Fund in 1991(RSA 40:2). According to the Department of Resources and Economic Development – Division of Parks and Recreation, the State Park fund has shown a net operating income gain for 6 out of the last 10 years, and currently offers more opportunity than general funding by the state.

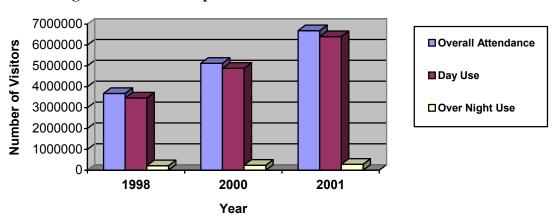


Figure 10. New Hampshire State Park Visitation Trends

The White Mountain National Forest. The White Mountain National Forest (WMNF) is a major recreation and tourism destination in New England and is within a day's drive of almost one-third of the nation's population. According to the *White Mountain National Forest 2000 Monitoring Report*, the WMNF provides about 1,200 miles of hiking trails, 20 scenic outlooks, 22 campgrounds, 13 picnic areas, over 60 huts, tent sites, shelters, and backcountry cabins. The report notes that shelter site use has increased by 7 percent annually from 1986 to 1999 and hut use has increased by about 2.5 percent annually between 1986 and 2000.

A relatively new component of recreation management in the White Mountain National Forest is found in the fee demo program. This user-pays program, begun in 1997, charges visitors a small fee for day/weekly use, or offers frequent visitors a \$20 annual pass. Funds are used specifically to enhance the recreational uses of the forest. Forest managers see these monies as an important means of maintaining or improving visitor facilities as federal appropriations dwindle. Fee receipts fell slightly over the last year. Receipts totaled about \$786,000 in 1999, and fell to about \$656,500 in 2000.

The US Forest Service completed a survey in 2001 that examined visitor use in the WMNF. Visitors were interviewed at a variety of sites during 2000. These statistics provides data about who goes to the WMNF, what they do there, and how satisfied they were with facilities and the experience. This study found that almost two-thirds of visitors were male (65 percent). Almost 43 percent of visitors were between the ages of 41-50 and an overwhelming majority of visitors were white (93 percent). About 2.4 percent of visitors were Asian, 2 percent African-American, and 2 percent American Indian/Alaska Native.

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A majority (93 percent) of those interviewed indicated that the White Mountain National Forest was their primary destination for that trip. The most popular activities in the WMNF include viewing wildlife and natural features, sightseeing, hiking and walking, general relaxation, driving for pleasure on forest roads, cross-country skiing, and developed camping. Respondents listed cross-country skiing, developed camping, downhill skiing, picnicking, general relaxing, and hiking/walking most frequently as the primary activity they participated in during that WMNF visit.

Socio-Economic Trends

Income. National figures (NSRE 1994-95) suggest that participation in many outdoor recreation activities is positively associated with income levels. Participation tends to be higher for those with middle incomes than those with low incomes, though participation rates fall slightly for those with the highest incomes (greater than \$100,000). Figure 11 shows that New Hampshire, Massachusetts, and New England as a region, all have higher income levels than the United States average. Massachusetts, in fact, has one of the highest per capita personal incomes levels in the country.

\$35,000 \$30,000 US \$25,000 \$20,000 ■ NH \$15,000 ■ Mass \$10,000 ■ New \$5,000 **England** \$0 1990 1994 1998 2000

Figure 11. Per Capita Disposable Personal Income

Source: Bureau of Economic Analysis, Regional Accounts Data, Annual State Personal Income

New England, and Massachusetts in particular, makes up a majority of the state's out-of-state tourism base. If these regional income levels remain consistently higher than the national average, this may have positive effects on New Hampshire's travel and tourism economy and on overall demand for outdoor recreation.

Population. As population increases, overall demand for outdoor recreation (as measured by the number of people participating) is also likely to increase. Table 19 shows that, in the last decade, the state's overall population has increased by 11.4 percent. Much of this increase is represented by the growth in the southern tier of the state.

Table 19. Actual and Projected Population by County: 1970-2020							
	1970	1980	1990	2000	2005	2010	2020
BELKNAP	32,367	42,884	49,216	56,325	60,296	63,746	69,956
CARROLL	18,548	27,931	35,410	43,666	47,188	51,274	57,790
CHESHIRE	52,364	62,116	70,121	73,825	77,336	80,376	88,206
COOS	34,291	35,147	34,828	33,111	32,770	31,873	34,978
GRAFTON	54,914	65,806	74,929	81,743	86,512	91,462	98,851
HILLSBOROUGH	223,941	276,608	336,073	380,841	406,344	429,594	469,923
MERRIMACK	80,925	98,302	120,005	136,225	145,497	155,208	173,370
ROCKINGHAM	138,951	190,345	245,845	277,359	294,927	313,188	342,177
STRAFFORD	70,431	85,408	104,233	112,233	117,971	124,721	136,871
SULLIVAN	30,949	36,063	38,592	40,458	41,945	44,345	48,665
NEW	737,681	920,610	1,109,252	1,235,786	1,310,786	1,385,787	1,520,787
HAMPSHIRE							

Sources: 2000 US Census – New Hampshire, US Bureau of the Census New Hampshire Population Projections 2000-2020, Office of State Planning, 1997. New Hampshire Population Projections 2005-2025, Office of State Planning, 2002.

Hillsborough and Rockingham Counties, the two counties with the greatest overall population levels, accounted for 60 percent of the total population gain between 1990 and 2000. The greatest percentage gain was noted in Carroll County. Carroll County grew by over 23 percent or by more than 8,000 new residents in the 10-year period between 1990 and 2000. Belknap County saw a rise of over 14 percent. Only Coos County saw a decline in population. Population projections out to 2020 indicate that similar patterns, countywide can be expected in the future.

Looking at 30-year trends from 1970 to 2000 (Table 20), Carroll County shows the highest rate of growth at over 135 percent. Rockingham, Hillsborough, Merrimack, and Belknap Counties were all above the statewide average of 67.5 percent. Only Coos County shows a net loss of population. The population fell by 3.4 percent between 1970 and 2000.

Table 20. Rate of Population Change in New Hampshire Counties					
Percent Change in Population	1990-2000	1970-2000			
BELKNAP	+14.4%	+74.0%			
CARROLL	+23.3%	+135.4 %			
CHESHIRE	+5.3%	+41.0%			
COOS	-4.9%	-3.4%			
GRAFTON	+9.1%	+48.9%			
HILLSBOROUGH	+13.3%	+70.1%			
MERRIMACK	+13.5%	+68.3%			
ROCKINGHAM	+12.8%	+99.6%			
STRAFFORD	+7.7%	+59.4%			
SULLIVAN	+4.8%	+30.7%			
NEW HAMPSHIRE	+11.4%	+67.5%			

Sources: 2000 US Census– New Hampshire, US Bureau of the Census

Age. According to the 2000 Census, the average age of the population in New Hampshire is 37.1 years. This compares to an average age of 30.1 in 1980 and 32.8 in 1990. These trends are consistent with nationwide averages. The baby boomers are growing older and people are living longer and healthier lives. This trend towards an older average population is expected to continue and recreation providers will need to consider this aging population in the years to come.

On average, about 75 percent of the state's population is aged 18 or older. Looking at the county level, Grafton County and Coos County had older than average populations, and Hillsborough and Rockingham had the youngest. This younger population base in the southern part of the state can probably be linked to the influx of new residents and families to the area in the 1980s and 1990s. Many are young professionals with kids who work in and around the Boston metro area. The older average age of the northern tier of the state suggests that there are, on average, fewer families with small children, and suggests that some who moved to this region in the 1990's may have done so later in life.

Race and Ethnicity. New Hampshire has a very small minority population, compared to the rest of the nation. While still an overall small percentage, New Hampshire's minority population has grown in the last decade. Census figures for 2000 show minority racial groups represent almost three percent of the state's population, up from about two percent in 1990. The 2000 census figures show that about one percent of New Hampshire's population is African American and 1.6 percent is Asian.

Census figures also provide information about ethnicity. The Hispanic/Latino population represents about 1.7 percent of the state's population. According to the 2000 Census, every county in New Hampshire has seen an increase in this sector of the population. Hillsborough County, and in particular the cities of Nashua and Manchester, have the largest Hispanic populations in the state. In fact, the Hispanic population in both cities has more than doubled in the last 10 years. Manchester's Hispanic population has

increased 133 percent in just a decade, up from 2,121 in 1990 to 4,944 in 2000. Manchester's total 2000 population was 107,006. Nashua's Hispanic population has increased 124 percent, from 2,407 in 1990 to 5,388 in 2000. Nashua's total population in 2000 was 86,605. This trend makes it increasingly important for communities to consider the needs and demands of a more culturally diverse population. In addition to the LWCF, the National Park Service also administers the Urban Park and Recreation Recovery Program (UPRRP). This federal program is aimed at more urban areas to help with recreation facility/area rehabilitation, planning, and other innovating projects. Currently, Manchester is the only New Hampshire community eligible to apply for UPRRP monies.

Community Recreation

Demand For LWCF funding. Table 21 below provides statistics related to New Hampshire's Land and Water Conservation Fund (LWCF) allocations for municipal projects. After several years of no funding, between 1995 and 1999, New Hampshire has again begun to receive federal LWCF funds. In the last two years, New Hampshire has distributed over \$1.35 million in grants, funding 15 different projects. Available grants fell far below the demand for funding. In this two-year period there were 65 local proposals totaling almost \$4.5 million in requests. Clearly, demand for local recreation funding remains strong across the state.

Table 2	Table 21. Municipal Demand for LWCF Assistance Since 1990, New Hampshire						
Federal Fiscal Year	NH LWCF Allocation for Municipal Projects	Dollar Value of Grants Requested	Сар	Shortfall	Number of requests	Number of grants funded	
1990	\$111,500	\$370,000	\$25,000	\$258,500	19	6	
1991	\$170,540	\$437,490	\$25,000	\$266,950	23	8	
1992	\$129,509	\$592,428	\$25,000	\$462,919	30	8	
1993	\$170,000	\$719,812	\$25,000	\$549,812	39	9	
1994	\$168,096	\$587,984	\$25,000	\$419,888	30	9	
1995 TO 2000	\$0	N/A	N/A	N/A	N/A	N/A	
2001	\$600,000	\$1,955,072	\$100,000	\$1,355,888	30	7	
2002	\$750,000	\$2,500,000	\$100,000	\$1,750,000	35	8	

Source: DRED, 2002

Community Needs. In 1993 and again in 1997 OSP conducted a Recreational Leaders Survey to gain a better understanding of local recreational demand and need. Of the 130 communities surveyed, 46 responses were received (35 percent response rate). While New Hampshire communities vary significantly depending on location and size, this data does provide some clues about general recreational trends and needs facing New Hampshire communities, as identified by recreation leaders.

This survey asked recreation leaders (e.g. recreational directors) about recreational facility needs in their communities. Table 22 shows that play fields (ball fields) were identified most frequently as a "need" in the community. Specifically, about 70 percent of respondents indicated that their town needed at least one ball field. Other facilities identified most often include outdoor ice skating areas, bicycle trails, playgrounds, hard court games and picnic areas. Golf courses and campgrounds received the lowest priority rating (4.3 percent respectively).

Questions posed to recreation leaders also centered on community need for local recreational programs and activities. The most frequent programmatic needs included elderly programs (57 percent), followed by concerts, plays, and shows (41 percent). About 39 percent of respondents indicated that their community needed youth programs, programs for the disabled and environmental education programs, and 35 percent identified arts and crafts programs and adult sports leagues as needing expansion, respectively. When asked what was the best thing about recreation in their town, 48 percent of respondents indicated that they felt recreation programs were well supported in the community. When asked about the worst thing, 33 percent indicated insufficient funds for recreation.

Table 22. Reported Community Recreational Needs						
1	997 TOP FACILITY NEEDS	19	93 TOP FACILITY NEEDS			
Rank	Facility	Rank	Facility			
1	Ball fields	1	Softball/baseball fields			
2	Outdoor ice skating	2	Tennis Courts			
3	Bicycle trails	3	Trails			
4	Playgrounds	4	Outdoor Basketball			
5	Picnic areas	5	Playgrounds			
6	Hard court games (basketball)	6	Swimming Pool/Beach			
7	Trails (hiking, nature study, cross-country skiing)	7	Community Center			
8	Gymnasium	8	Gymnasium			
9	Tennis courts	9	Skating Rink			
10	Parks	10	Track			

Source: OSP Recreational Leaders Survey, 1997 and 1993

The survey above was directed towards recreational directors and committees. Given this, many questions focused on developed recreation facilities and programs, typically the responsibility of recreational leaders, rather than on a broad set of structured and unstructured activities (e.g. trails in town forests, conservation lands) that are available within a community¹¹.

Other Local Indicators. In 2001, the University of New Hampshire, through the Master's in Public Administration program, conducted a survey of community recreation directors/leaders in New Hampshire who are part of the New Hampshire Recreation and Park Association (NHRPA). In all, 72 communities at the time were members of the NHRPA. Forty-five agreed to participate in the telephone interview, resulting in a participation rate of 62 percent.

The survey asked questions related to program organization, structure, and effectiveness, rather than asking for information about specific recreational needs. This data provides some context and information about how recreation-related decisions are made locally. For instance, approximately 56 percent of the surveyed recreation leaders report to the Town Administrator, 13 percent report to the Board of Selectmen, and 11 percent report to the parks and recreation committee in their community. The remainder (20 percent) report to various other entities in the community. Almost three-quarters (73 percent) have a parks and recreation committee in their community. Of these, 60 percent are appointed. About 67 percent of those surveyed indicated that their community has a recreation master plan.

The survey also asked several questions about community recreation facilities and programs. When asked for their personal opinion, only 24 percent of respondents indicated that the existing facilities inventory met the current demand. A majority of recreational leaders felt that local demand currently exceeds supply. Recreational programs were perceived differently. A majority (69 percent) felt that the existing recreation program inventory met the current demand.

When asked about maintenance and joint-use, 44 percent of leaders indicated that the parks and recreation department maintain town facilities and 18 percent of communities surveyed have facilities maintained by the public works department. A majority of the communities surveyed have some level of access to (or utilize) school district facilities (91 percent), though the extent of access or shared use is not known.

In terms of budgets and fees, almost 89 percent of surveyed park and recreation departments charge fees for some programs/facilities, and 69 percent charge different fees for residents than non-residents. Of the fees generated, about 64 percent of respondents said the money went into the community General Fund and only 13 percent said it went into a designated parks and recreation fund.

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¹¹ Future OSP surveys may want to explore a wider range of activities and be directed to both local recreation leaders and conservation leaders. This broader range of perspectives may provide additional guidance about how community leaders jointly perceive open space needs, unstructured recreational needs, and developed or structured recreation facility needs.

Community Profiles

In the last decade, UNH Cooperative Extension has completed Community Profiles in over 60 communities across the state. Community Profiles provides a forum for local leaders and residents to identify key issues in their community and generate action steps to address those issues. UNH Cooperative Extension recently reviewed these 60 profiles to identify common threads among communities. As part of this process both major and minor themes were identified.

Though not a major theme for communities, outdoor recreation was identified as a prevalent issue within larger themes. This review found that recreation is often expressed as an issue within larger themes of economic development or community development. In terms of community development, increasing recreational opportunities was often identified as a way to develop a stronger sense of community and participate in shared activities. Increasing community access to important resources, such as trail systems or boat ramps was also identified as a theme in many communities. In several communities in the northern part of the state, recreation was discussed in terms of economic development. Improving recreation is seen as a mechanism for increasing tourism in the region.

Natural resource protection was an important theme discussed by many communities across the state. Often resource protection was discussed in concert with discussions about the opportunities for economic development through tourism, the need to plan for managed growth, and needs related to community development through improved recreational access. This intertwining of issues on paper reflects the real-world integration of resource protection issues with recreation, community, and economic development and the need to plan for smarter, balanced growth locally.

SECTION 3: RECREATIONAL ISSUES OF STATEWIDE IMPORTANCE

Changing conditions and trends have far reaching implications for recreation and open space planning. According to *Park, Recreation, Open Space and Greenway Guidelines* (1996) developed for the National Recreation and Park Association and the American Academy for Park and Recreation Administration, this has meant a greater emphasis on comprehensive open space and greenway planning, and a greater integration of recreation, open space, and transportation goals. There is also a growing trend towards more collaboration among recreation providers, and between community parks and schools. Other trends include greater inclusion of green spaces as part of downtown and neighborhood revitalization, and a heightened recognition of the role recreation and open space play in contributing to more livable, sustainable communities.

The six issues discussed in this next section includes information and data from a variety of sources, along with input from the SCORP Steering Committee, larger SCORP Public Advisory Committee and other comments received during the course of the planning process. Open-ended responses from the SCORP Stakeholder Group Survey (See Appendix C-2) were helpful in framing objectives and strategies aimed at addressing issues. The six issues are summarized below:

- Stewardship of the Resource Base for Outdoor Recreation
- Providing Different, Sometimes Competing, Recreational Opportunities
- Apply Limited Financial And Human Resources To Address A Range Of Recreation Needs
- Education Of Recreational Users, Municipalities And Landowners About Responsible Behavior, Laws, and Liability
- Impacts Of Existing Land Use Patterns On Recreational Opportunities
- Importance of Local Outdoor Recreation Opportunities and Open Space Protection in Promoting Increased Health and Wellness

Under each of the six issue sections, discussion starts with a section summary, highlighting major points and findings, including general trends expressed during the early stages of the SCORP public involvement process. This is followed by a more detailed discussion of the issue, especially as it relates to New Hampshire.

This discussion is then followed by a set of recommendations containing goals, objectives, and strategies that have been identified with the assistance of the SCORP Steering Committee and SCORP Public Advisory Committee to help address this issue in New Hampshire. Some recommended strategies are specifically targeted towards the allocation of Land and Water Conservation Fund (LWCF) monies¹. Others represent broader policy or practical recommendations.

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¹ Strategies denoted by **(LWCF)** represent recommendations targeted towards New Hampshire's apportionment of Land and Water Conservation Fund monies.

LWCF Administration

LWCF administration in New Hampshire is coordinated through the Department of Resources and Economic Development – Division of Parks and Recreation. DRED oversees the Open Project Selection Process (OPSP) to aid state allocation of LWCF monies. This process is informed through SCORP planning efforts.

The OPSP process contains a set of criteria and point awards used to rank projects and allocate LWCF funds. These selection criteria are reviewed and revised by an OPSP Advisory Panel and the SCORP recommendations provide guidance for modifying or adding criteria based on updated information. Membership on the OPSP Advisory Panel includes a range of agencies and organizations representing recreation and conservation interests. Please refer to **Appendix F** for more information about the OPSP process and how decisions about LWCF allocations are made in New Hampshire.

While helping to set LWCF priorities is a required function of a SCORP, New Hampshire's plan goes beyond this requirement to also establish recommendations aimed at addressing a wider set of New Hampshire's outdoor recreation issues. These recommendations are targeted towards many different agencies and organizations. This reflects the fact that outdoor recreation issues far outreach any single agency, and resolving issues will require coordination, partnerships, and collaboration. A resource list containing information about a range of recreation-related organizations and agencies is found in **Appendix D**. Not every agency and organization has been listed in this list. Efforts will be made update and expand this list over time.

While emphasis must be placed on addressing these individual issues, there is also an overarching need to improve upon the way outdoor recreation is incorporated into larger, broader decision-making in the state, and on the way the SCORP planning process is undertaken in future years. SCORP planning should be an on-going continuing effort with emphasis on implementation. The state should also continue improve upon its efforts to include a wide range of perspectives in ongoing recreation planning work. The Stakeholder Group Survey (**Appendix C-1 & 2**) was a first step in involving a larger audience in the planning process.

STEWARDSHIP OF THE NATURAL RESOURCE BASE FOR OUTDOOR RECREATION

SUMMARY

New Hampshire is facing increased pressure on its existing resource base. Tourism continues to play a key role in the state's economy. Visitation rates are increasing (e.g. State Parks) and development pressures and population growth continue, especially in the southern part of the state.

- Recreational use can have negative impacts on natural resources (e.g. trail erosion, introduction of exotic species, impacts on wildlife).
- Some feel that certain recreational activities have greater negative impacts on the resource base and should be limited or restricted.
- Others feel that all types of use should be allowed on any publicly held land.
- Some of the most popular recreational activities in the state (e.g. walking, wildlife watching, hiking) as identified in the *Statewide Outdoor Recreation Needs Assessment* (UNH, 1997) are highly dependent on open space and tracts of undeveloped lands.
- This same statewide outdoor recreation assessment shows that residents view the
 protection of natural landscapes and natural areas as highly important
 management objectives. About 71 percent felt that setting aside natural areas
 from development was either a very or most important management objective of
 the state. Seventy six percent felt it is very or most important to protect typical
 examples of New Hampshire's natural regions.
- Protection of existing greenways and trail corridors has become an increasing challenge due to changes in land ownership, private land closures, and increased development (*Comprehensive Statewide Trails Study*, 1997).
- Private lands (current use, easements) play an important role, alongside public lands, in protecting the resource base and providing for certain traditional forms of recreation.
- According to *New Hampshire's Changing Landscape* (1999), the southern half of the state has 90 percent of the population but only 30 percent of the state's undeveloped land. Some towns in the southern part of the state have less than one acre of undeveloped land per person. The current network of conservation lands does not adequately protect many of the known rare plant and animal species.

OVERVIEW

Continued conservation and stewardship of the resource base is critical to maintaining a wide range of recreational opportunities. Without concerted efforts to protect open space, both the quality and quantity of many of the most popular outdoor recreational opportunities is likely to deteriorate. This stands to become an even greater issue as competing pressures on existing open space grow and demand for outdoor recreation continues to rise.

Of course, the benefits of land and water protection extend beyond outdoor recreation opportunities. Protected lands and open space help protect our water supplies, preserve important wildlife habitat as well as rare and endangered species, help maintain community identity, and protect our natural and cultural heritage. In short, open space is critical to maintaining New Hampshire's quality of life. Given all of these reasons, including opportunities for outdoor recreation, it is of utmost importance to identify and protect important natural lands and resources, as well as practice good stewardship to maintain the health of these resources for future generations.

As population increases and undeveloped land is converted to other uses, large tracts of un-fragmented open space are lost. Open space planning on a local, regional, and statewide level will become ever more important to help identify critical areas, identify how they can be protected, and understand how these areas can be linked together through greenways and natural corridors. From a recreation perspective, it is often the trail linkages found within the corridors and greenways themselves that are of key importance. Planning for trail corridors and greenways should be considered hand in hand with open space planning efforts.

The relationship between land and water conservation and recreation is not necessarily static. Unmanaged recreation can also bring negative impacts to the very resources on which it depends. Once land is placed under permanent conservation, it still needs long-term management and stewardship to protect important resources. Good planning, management and stewardship are important to limit potential impacts to ecologically sensitive areas and wildlife, as well as to maintain quality recreational experiences.

NEW HAMPSHIRE CONDITIONS AND TRENDS

Land protection and resource conservation are important to New Hampshire residents. Some of the most popular recreational activities in the state (e.g. walking, wildlife watching, hiking) as identified in the *Statewide Outdoor Recreation Needs Assessment* (UNH, 1997) are highly dependent on open space and tracts of undeveloped lands. This same statewide outdoor recreation survey shows that residents view the protection of natural landscapes and natural areas as highly important management objectives. About 71 percent felt that setting aside natural areas from development was either a very or most important management objective of the state. Seventy six percent felt it is very or most important to protect typical examples of New Hampshire's natural regions.

Public and Private Conservation

Resource conservation efforts in New Hampshire have a long tradition in both the public and private arena. Likewise, lands under public and private ownership both offer important outdoor recreation opportunities. Different types of ownership often bring different management objectives. This, in turn, brings different opportunities for outdoor recreation and varying levels of public access.

Parks, for example, often provide opportunities for a wide range of activities such as picnicking, swimming, camping, or mountain biking, while many conservation easements

or privately held tracts of open space may only offer access for traditional activities such as hiking, bird-watching, and cross country skiing. A main function and purpose of many public park lands is to provide and promote opportunities for public recreation while maintaining important green space. On the contrary, many private lands or lands under easement may be primarily focused on maintaining a working forest or protecting water supply lands, though provisions are often made to permit (or guarantee) certain forms of public access.

Public lands in New Hampshire are owned and managed by a range of federal, state, regional and local agencies. Other undeveloped lands, though not permanently protected, include those that qualify for important tax incentives to remain undeveloped (e.g. Current Use). Private lands with permanent protection include those owned by private conservation organizations, such as the Society for the Protection of New Hampshire or The Nature Conservancy, and those under easement with a private or public organization.

About 22 percent of the land base in New Hampshire is permanently protected through a public entity or private non-profit organization. Looking closer, about 56 percent of these protected lands fall under federal control within the White Mountain National Forest. Over 70 percent of New Hampshire's protected lands lie within the northern half of the state.

Even with this range of efforts, undeveloped land continues to be developed at a fast pace and is cause for continued concern. According to *New Hampshire's Changing Landscapes* (1999), prepared by the Society for the Protection of New Hampshire Forests and the New Hampshire Chapter of the Nature Conservancy, New Hampshire is the fastest growing state in the Northeast, growing 6.8 percent between 1990-1998. About half of this growth is due to in-migration, or people moving to New Hampshire from other states.

The report also indicates that overall forest cover in New Hampshire is declining. Forest cover, at a high of 87 percent in 1983, fell to 83 percent in 1993. Compounding this general trend is the drift towards increased fragmentation of existing undeveloped lands. This trend is expected to continue, with the greatest loss and fragmentation of forested land anticipated in the southeastern tier of the state (Rockingham, Hillsborough, and Strafford Counties).

Additional analysis found that only 22.2 percent of the state's high-value wetlands are under permanent protection, and less than 25 percent of known rare plant and animal species, and only 40 percent of classified rare natural community types, respectively, are adequately protected by existing conservation lands. The New Hampshire Fish and Game Department through its Non Game and Endangered Wildlife Program, the New Hampshire Natural Heritage Bureau, along with private organizations such as the New Hampshire Chapter of the Nature Conservancy, the Audubon Society of New Hampshire, and the Society for the Protection of New Hampshire Forests, are all working to enhance understanding of important rare and endangered species across the state and foster protection of resources that protect these resources.

Together, many of these organizations and others are part of the New Hampshire Living Legacy project, formerly the NH Ecological Reserve System Project. This project, coordinated through UNH Cooperative Extension, is a collaborative effort aimed at establishing and supporting "...a well-coordinated, comprehensive system of public and private lands voluntarily dedicated to protecting the full spectrum of biological diversity in New Hampshire." This partnership, among other things, looks to develop new conservation tools, increase public understanding of the values of biodiversity and opportunities for conserving these values, promote research and tracking capabilities of existing agencies, understand the relationship between biodiversity (and biodiversity protection) and other land uses, and support and integrate the Living Legacy Project into existing programs, agencies and conservation lands.

LCHIP. Concerns about these trends are underscored by the recent legislative support for the Land and Community Heritage Investment Program (LCHIP). Leaders in New Hampshire recognized the important role natural and cultural resources play in promoting a good quality of life in New Hampshire, and the need to support statewide funding efforts to help communities and non-profit organizations make a difference at a local or regional level. This program, established in 2000 under RSA 227-A, has provided over \$9 million in grants (to date) aimed at protecting important natural, historical. and cultural resources across the state. By the end of fiscal year 2003, LCHIP will award its final \$6 million in secured appropriations.

Levels of future funding for LCHIP remain a question heading into the next fiscal year (2004). The Land and Community Heritage Authority, created by the legislature in 1998, recommended that LCHIP be permanently funded at \$12 million annually to meet the growing and pressing needs for resource protection in New Hampshire. Thus far, LCHIP has received annual funding short of this recommended level. Recent state budget shortfalls and expected economic tightening will likely make LCHIP an important topic in the next legislative session.

Recent Conservation Efforts

In the past year, New Hampshire has succeeded in protecting large tracts of lands in northern New Hampshire, through a mix of federal, state, and private efforts and in-kind contributions. The largest and best example is represented by the Connecticut Lakes Head Waters project in the northern part of the state. This massive conservation effort consists of 141,400 acres of private timberland encumbered by a state-held conservation easement, a 25,000 acre natural area owned by the State and encumbered by a Nature Conservancy easement, as well as a 100 acre piece that will be added to an existing state-run (DRED) campground.

This large-scale conservation effort will benefit the entire state. In addition to preserving important landscape scale natural habitats, the headwaters of the Connecticut River and productive forestlands, these lands will retain deeded rights to public access in perpetuity. Management or stewardship plans will be developed for forestry, as well as recreation, to help ensure this significant area will be well managed into the future.

As important as these large-scale efforts are in protecting state resources, they alone will not ensure New Hampshire's natural and cultural resource base is maintained. Local and regional efforts are also critically important to help New Hampshire communities maintain individual identity, retain rural or traditional character, keep costs of community services from rising quickly, and keep lands open to traditional types of recreational activities.

The Society for the Protection of New Hampshire Forests recently (2001) produced a working paper entitled *New Hampshire Everlasting; An Initiative to Conserve our Quality-of-Life.* This paper reflects upon the importance of undeveloped lands to communities in New Hampshire and offers a series of goals to "...guide the selection and conservation of lands for communities, forestry, habitat, clean waters, and farming." The vision, statewide, is to protect an additional one million acres in the next 25 years. A set of five goals is offered to address this vision. The first goal has direct links to outdoor recreation:

"Support every community in conserving, with partners, at least twenty-five percent of its lands for a network of trails, parks, farms, and forests where people can connect with the natural world". ("NH Everlasting", pg 6)."

Recreation lands identified in this 25 percent goal include village and downtown parks, outdoor recreation fields, town forests, lands with scenic beauty and community character, and a recreation and commuter trail network. These lands are part of a larger 'green infrastructure' that provides critical benefits to both individuals and communities.

This 2001 paper emphasizes that a range of conservation lands and parks, including those lands that are close to home, are needed to support a good quality of life. Currently, about 50 percent of communities in New Hampshire have less than 10 percent of their lands permanently conserved. Of those that do have 25 percent of their lands permanently conserved, most are located in the northern part of the state.

The good news is that almost all of New Hampshire's communities have at least 25 percent of their land base still undeveloped. So the possibility for permanent land protection remains strong. Meeting this goal will take creative partnerships and concerted efforts by agencies, municipalities, and private organizations alike.

Partnerships. Regional and local land trusts, as well as local conservation commissions are becoming increasingly important players in protecting critical habitats and open space lands in New Hampshire communities. On a local level, community leaders are increasingly partnering with a local or regional land trust to protect local lands or secure conservation easements on lands of significance. This partnership takes advantage of a land trust's expertise in both completing sometimes-complicated land transactions and holding conservation lands in perpetuity, while utilizing local knowledge, planning efforts, and financial resources of the community.

In general, public/private partnerships are critical to protecting natural resources. Limited funds and staffing of public agencies and municipalities limit the ability of government to not only protect lands, but also weave together networks of conservation lands. Private organizations, be it on a national, state, regional or local level, all play key roles in both identifying and protecting important natural resources. One good regional example is the Great Bay Resource Protection Partnership (GBRRP), formed in 1994 to identify and protect significant habitat areas in the Great Bay region. This successful partnership is comprised of statewide, regional, and local non-profit conservation organizations, municipalities, and state and federal agencies. Over the last several years, the GBRRP has produced a Habitat Protection Plan identifying over 14,000 acres of important habitat, organized into 25 Significant Habitat Areas. These Significant Habitat Areas range from 400 to 10,000 acres in size. As of January 2002, this public/private partnership has protected over 3,400 acres through fee purchase, easements, and donations.

Local Financing. Communities are using a range of methods to help fund their conservation goals. Over half of New Hampshire communities (at least 117) are

currently taking advantage of RSA 36-A:5.1 which allows a town to dedicate a portion or all of the Land Use Change Tax (RSA 79-A:7) to a local Conservation Fund. Land use change tax monies are derived from penalties assessed on lands taken out of Current Use. Funds placed in the conservation fund are allowed to accumulate from year to year and may be expended by the Conservation Commission without further approval of the town meeting. The New Hampshire Association of Conservation Commissions retains a

Center for Land Conservation Assistance

A new resource center in Concord called the Center for Land Conservation
Assistance serves to build the capacity of New Hampshire land trusts and acts as an information and resource center for local and regional land protection efforts.
Contact the Society for the Protection of NH Forests more information.

list of communities that allocate some or all of the land use change tax monies to the local conservation fund.

These land use change tax monies, while often substantial, do not always provide the necessary funds, at the necessary times to secure important tracts of undeveloped lands. Land values in many parts of the state are skyrocketing and undeveloped, buildable parcels are often on the market for only a short time. Even conservation minded landowners cannot always wait for a Town vote in March to sell their property.

Several communities in the southern part of New Hampshire have chosen to pursue open space bonds as a means for addressing this issue. An open space bond, paid back over a period of years at a set interest rate, provides a community with present day access to funds that can be used to help purchase important natural lands or conservation easements over the next few years. Given the current low interest rates, the extraordinary

growth and development seen in recent years, and the escalating land values, many communities have been successful in securing broad-based resident support.

Planning for Resource Protection. An important component of utilizing conservation funds wisely is to proactively plan for open space and conservation. Open space planning is an important aspect of identifying key parcels and developing strategies for their protection, and these efforts can also be incorporated into larger town master planning efforts. Identifying major resource protection needs, setting priorities and producing a plan for addressing these needs are all important aspects of planning for how the community wants to look in the future.

When planning for resource and land conservation, consideration should be given to identifying and seeking protections on lands that adjoin existing conservation lands, infill lands that help bridge two conserved areas, and lands that help to create open space corridors and networks of green space.

It is also important to give consideration to lands that can act as buffers around ecologically significant resources (e.g. upland buffers around wetlands, riparian buffers, etc). Many of these lands and buffers not only protect significant resources themselves, but also can provide important opportunities for recreation. For instance, a riparian buffer could help protect important natural resources, while also offering an opportunity for a riverbank walking trail or shore bank fishing.

Hanover's Open Space Priorities Plan

The Town of Hanover prepared an award-winning open space plan in 2000. Hanover understood that while there were a number of different organizations and private landowners involved in land protection efforts, there had never been a concerted town-wide open space planning effort. The Open Space Priorities Plan was developed to provide guidance for acquisition of fee or easement properties using the town's Conservation Fund, to provide a common understanding of existing areas of open space and possible linkages with surrounding towns, and to set a common vision for future land protection efforts in Hanover. The Plan explicitly recognizes that efforts to implement the ideas and strategies will only be achieved in cooperation with willing landowners, will require many years to implement, and will require public funds as well as private, individual efforts. Priorities are established for Conservation/Recreation action areas as well as In-Town Open Space action areas including connectors to link downtown and conservation/recreation areas.

Stewardship. Natural resource stewardship has many different facets, including land management, conservation easement monitoring, research, education, planning, and enforcement. Looking after lands and resources in the long run requires a concerted effort and often a substantial investment. Without adequate long-term stewardship, lands and resources that have been protected on paper may still be subjected to ground events that can threaten long term protection. Too often in the past lands have been acquired for conservation purposes, without adequate consideration of long-term stewardship.

Increasingly, there is growing awareness across the state about the importance of stewardship. Land managers are becoming increasingly aware that there are real costs in managing conservation lands, especially managing for public recreational use. More and more, conservation easement holders seek contributions to a stewardship endowment to help offset the real costs associated with looking after an easement in perpetuity. The Land and Community Heritage Investment Program (LCHIP), as an example, require applicants to prepare a stewardship plan as part of the application process. In addition, LCHIP provides a stewardship contribution for fee and easements lands to help ensure that the state's interest in the land is maintained.

Public agencies and private organizations alike often face issues with lack of staffing and resources needed for management, stewardship, research, education and enforcement. In addition, there is some concern that as private landholders, including land trusts and conservation organizations, are faced with increasing costs associated with allowing public use of their lands, there will be a trend towards further restricting or prohibiting public use.

Clearly public use of the resource base, whether publicly or privately held, can bring with it management and stewardship challenges. It is important to expand and broaden the discussion about shared concerns, and recognize that both public and private entities face many of the same challenges. Sharing knowledge about stewardship concerns is a first step. Concerted efforts should be made to build a statewide discussion about this topic and develop better ways of promoting information exchange.

Surface Water

Protecting both the quality and the health of our wetlands and surface waters remains a high priority in the state. The New Hampshire Comparative Risk Project found that three of the top five environmental risks involve water resources of the state. Surface waters provide important sources of drinking water, provide important habitat for a variety of species and provide abundant opportunities for recreation for local residents and tourists alike. As water-based or water-enhanced recreation continues to rise, it becomes increasingly important to consider efforts to protect these water resources.

Both public and private organizations are deeply involved in protecting the quality of the state's water resources. The Department of Environmental Services (DES) is the agency with the main responsibility for protecting the state's water resources. A mission of DES is "...to ensure that New Hampshire's lakes and ponds, rivers and streams, coastal waters, groundwater and wetlands are clean and support healthy ecosystems, provide habitats for a diversity of plant and animal life, and support appropriate uses." Several programs, including New Hampshire Lakes Management and Protection Program and the Rivers Management and Protection Program are in place to help coordinate efforts to protect water resources. DES also enforces existing laws aimed at protecting water resources, including The Comprehensive Shoreland Protection Act.

The DES Volunteer Lake Assessment Program is a cooperative program between the New Hampshire Department of Environmental Services and lake residents and lake

associations. Currently about 130 lakes are monitored under this program. In addition to taking samples from the lake, volunteers sample the streams and rivers that act as tributaries to the lake.

The University of New Hampshire Cooperative Extension coordinates the volunteer Lakes Lay Monitoring Program. Through this joint effort between UNH Cooperative Extension and the State of New Hampshire, over 100 lakes are sampled each year using citizen volunteers. This coordinated volunteer effort helps scientists understand water quality trends over time. Water samples are taken on a monthly basis and analyzed for chlorophyll a and total phosphorus, as well as monitoring of water clarity and dissolved oxygen. The <u>Great Bay Watch</u>, in existence for over 10 years, involves volunteers in monitoring water quality in Great Bay and its tributaries.

With increased recreational use of surface water, resource managers are continually focused on preventing the introduction of exotic species such as milfoil, fanwort, and zebra mussels. This past year the General Court expressed increased support of these efforts by enhancing the New Hampshire Clean Lakes Program. RSA 487:25 will increase boat registration fees by \$3. These funds will be placed into the Lake Restoration and Preservation Fund, aimed specifically at the prevention of exotic species. In addition, a number of lakes associations are supporting on-site prevention efforts by serving as "Lake Hosts", educating boaters about exotic species and ways to prevent introduction.

The DES <u>Exotic Species Program</u> provides information on different types of exotics that have been found in New Hampshire, and those that have been found in neighboring states. The Program also oversees a volunteer Weed Watcher Program to encourage recreationists, lakes associations, and others to monitor lakes as an early detection method. Figure 12 shows a map depicting locations where exotic species have already been identified.

EXOTIC AQUATIC PLANT SITES IN NEW HAMPSHIRE Winnipesaukee Lake (Gilford) Variable milfoil Species Paugus Bay (Laconia) Loes Pond (Moultonborough) Ossipee Lake-Broad Bay (Freedom) Waukewan Lake (Meredith) Variable Milfoil Eurasian Milfoil Opechee Lake (Laconia) Variable milfoil Winnisquam Lake (Meredith/Belmont) Variable milfoil Fanwort Silver Lake (Tilton) Variable milfoil Water Chestnut Brazilian Elodea Locke Lake (Barnstead) Variable milfoil Locke Lake (Barnstead)
Suncook Lakes (Barnstead)
St Paul's School Pond (Concord)
Little Turkey Pond (Concord)
Big Turkey Pond (Concord)
Bixby Pond (Epsom) Variable milfoil Variable milfoil Variable milfoil Variable milfoil Variable milfoi Bixby Pond (Epsom)
Northwood Lake (Northwood)
Massabesic Lake (Auburn)
Phillips Pond (Sandown)
Big Island Pond (Deny)
Arlington Mil Reservoir (Salem)
Cobbetts Pond (Windham) Variable milfoil Variable milfoil Fanwort Fanwort Fanwort Variable milfoil 1996 Captain Pond (Salem) Variable milfoil Captain Pond (Salem)
Flints Pond (Hollis)
Cheshire Pond (Jaffrey)
Contoccook Lake (Jaffrey)
Pearly Pond (Rindge)
Forest Lake (Winchester)
Connecticut River (Charlestown) Variable milfor Variable milfoil Variable milfoil Variable milfoil Variable milfoil Eurasian milfoi Connecticut River (Charlestown)
Massasecum Lake (Bradford)
Monomonac Lake (Rindge)
Hopkinton Lake/Dam (Hopkinton)
Nashua River (Nashua)
Powder Mill Pond (Hancock) Eurasian milfoli Variable milfoli Variable milfoli Variable milfoli Variable milfoli, Fanwort, Water chestnut Variable milfoli Ashuelot River (Winchester) Variable milfoil Little Suncook River (Epsom/Northwood) Variable milfor 2000 Little Suncook River (Epson 2000 Mine Falls Pond (Nashua) 2000 Winnipesaukee River (Tilton 2000 Cocheco River (Rochester) 2000 Robinson Pond (Hudson) 2000 Squam River (Ashland) 10 Variable milfoil;Fanwort Variable milfoil Variable milfoil Variable milfoil;Fanwort Variable milfoil Little Squam Lake (Holderness/Ashland) Variable milfoil 50 Horseshoe Pond (Merriman Gorham Pond (Dunbarton) Belleau Lake (Wakefield) Danforth Pond (Freedom) Variable milfoil 40 30 Rocky Pond (Gilmanton) Dublin Lake (Dublin) Variable milfoil Variable milfoil Sunapee Lake (Sunapee) Nutts Pond (Manchester) Contoocook River (Jaffrey) Turtle Pond (Concord) Variable milfoil Brazilian elodea Variable milfoil Variable milfoil Balch Lake (Wakefield) 2002 Melendy Pond (Brookline) Variable milfoil 20 52 29

Figure 12. Locations of Exotic Aquatic Plant Sites in New Hampshire

Source: DES Exotic Species Program Website, 2002.

Recognizing the important role surface waters play in the state's economy, the New Hampshire's Lakes Association is spearheading an effort to examine the economic impacts of lakes in New Hampshire. This three-phase project, currently in Phase II, will examine the economic impacts of swimming, fishing, and boating on the state's economy, as well as the economic impacts of shorefront property and drinking water supplies. The goal is to determine a range of dollar values for these uses and identify the impacts on the economy if environmental conditions change.

Air quality

Air quality can also have impacts on outdoor recreation and tourism. In 1996, New Hampshire's Comparative Risk Project examined issues pertaining to regional air quality. Pollutants include, among others, particulate matter, ground level ozone, acid deposition,

nitrogen, and sulfur oxides. The report highlighted that, as air quality decreases, there will be greater impacts on public health, our economy, ecological integrity, and on our quality of life. In regards to outdoor recreation and quality of life, there are concerns over the negative effects of smog on visibility and aesthetics, such as on hazy or low visibility days in the White Mountains. There are also concerns over human health, particularly for children, the elderly, and those with respiratory problems during poor air quality days in the Whites or on the Seacoast.

Negative impacts on recreational and scenic qualities (decreased visibility and aesthetics) and growing concern over health risks could also translate into real economic impacts. Worsening outdoor air quality could reduce the tourism appeal of some of our most popular destinations. Decisions about air quality take place well beyond state boundaries. Federal air quality and emission standards and the actions of power plants in other parts of the country have direct impacts on New Hampshire's air quality. This will be a growing topic of debate as discussions about federal air quality standards continue and air quality problems in the Northeast continue.

Recreational Vehicle Emissions

There are also concerns about the impacts of motorized recreation engines on air quality (as well as water quality). Marine gasoline engines and non-road recreational engines and vehicles including snowmobiles, off-highway motorcycles, and ATVs, contribute to regional haze and visibility problems in high use areas (e.g. parks, marinas), as well as to ozone formation and particulate matter and carbon monoxide levels. The Environmental Protection Agency (EPA) has issued guidelines for marine gasoline engines and non-road recreation engines beginning with model year 2006.

An effort is already underway in New Hampshire to meet these new requirements for outboard marine engines before 2006. New Hampshire's Clean Marine Engine Initiative consists of a public/private partnership between DES and the Marine Trades Association aimed at phasing-in low-pollution engines prior to the EPA 2006 mandate. The dealers and retailers who sign a voluntary agreement with DES promise to sell low-pollution outboard marine engines on a graduated schedule (percentage sold) up to full compliance by 2006.

Such a partnership and voluntary agreement sets a good model for other types of recreational engines. The State should explore the feasibility of forging a similar partnership with snowmobile and ATV recreational equipment dealers. Such a partnership would help to phase in these upcoming federal requirements in a proactive manner and send a positive message the importance of and commitment of riders to cleaner burning recreational engines.

Along with the efforts of the marine dealers, the State has been converting its fleet of watercraft to be outfitted with low pollution outboard engines. DES, the Fish and Game Department, and particularly the Marine Patrol of the Department of Safety, deserve praise for their efforts to put cleaner outboard engines on their watercraft. Over the last several years, these agencies have been replacing old carbureted engines with new 4-

stroke and 2-stroke engines. Of those boats in the state fleet with outboard engines, 80 percent are running cleaner, low polluting engines on the State's waterways.

New Hampshire's Clean Marine Engine Initiative

In 1996, the Environmental Protection Agency (EPA) passed a rule requiring new technology, low-pollution outboard marine engines and personal watercraft to be phased-in by 2006. Since low-pollution marine engines became available shortly after the EPA rule took effect, the NH Department of Environmental Services launched a unique initiative to promote the use of these engines. In February 2000, DES and the NH Marine Trades Association (MTA) signed a voluntary agreement (Memorandum of Understanding) to accelerate the phase-in of low-pollution engines prior to the EPA 2006 mandate. The dealers and retailers who signed the voluntary agreement would sell low-pollution outboard marine engines at the following percentage rates per year: 2000, 50 percent, or more; 2001, 75 percent, or more; 2002-2005: 90 percent, or more. In 2000, the participating dealers achieved a 65 percent sales rate and for 2001, a 75 percent sales rate, thus surpassing and achieving the voluntary sales goals for those years. The program has been well received by boaters across New Hampshire and has also served as a model for nine other states.

RECOMMENDATIONS

Stewardship Of The Natural Resource Base For Outdoor Recreation

GOAL: Ensure that the quality and quantity of the natural resource base is maintained or enhanced as recreation pressures increase.

I. Objective: Continue to support efforts to identify and protect open space lands.

Strategies

- A. (LWCF) Give priority to land acquisition efforts focused on natural areas/lands identified in existing local, regional, or state plans (e.g. lands might include forests, wetlands, rare natural communities, coastal areas, agricultural lands, etc.).
- B. Support efforts to secure permanent state funding for LCHIP (e.g. encourage groups to endorse and support Citizens for Land and Community Heritage).
- C. Support efforts to secure continued funding for federal programs (e.g. stateside LWCF funding, Forest Legacy, TEA-21, EPA Brownfields, Farm Bill etc.).
- D. Support comprehensive statewide and regional planning for open space, recreation corridors, and greenways (e.g. State, regional, and local open space plans, trail plans etc.).
- E. Educate the public on plans that currently exist (NH Living Legacy Project, Hanover Open Space Plan, etc.).
- F. Expand efforts to fund conservation for outdoor recreation at the local level (e.g. encourage communities to consider open space bonds and/or earmarking all or a portion of the local land use change tax for conservation purposes).
- G. Encourage state, regional, and municipal partnerships with non-profits and land trusts to acquire and protect locally significant open space lands (e.g. New Hampshire Association of Conservation Commissions, Center for Land Conservation Assistance).
- H. Target specific purchases in areas of the state where the fastest growth and usage is taking place (e.g. protect lands near areas experiencing increased development pressure to protect open space lands and recreational opportunities close to home).
- I. Target purchases that protect hydrological units or create or link large contiguous blocks of lands for wildlife and people.
- J. Support efforts to protect scenic views (e.g. encourage and give incentives to landowners to keep fields mowed. Examples might include the NH Fish and Game small grants programs for wildlife or establishing incentives through existing programs like Current Use).

II. Objective: Address environmental and cultural resource impacts from existing recreational facilities and when new recreation facilities/opportunities are developed.

Strategies

- A. **(LWCF)** Give priority to projects that help redistribute recreational use away from ecologically sensitive areas.
- B. Address impacts to important resources such as wildlife, water quality, rare or endangered species, cultural/historic resources, and sensitive areas when planning and designing trails/facilities and coordinate with affected agencies early in the planning process (e.g. coordinate efforts with NH Natural Heritage Bureau, Division of Historical Resources, etc.).
- C. Evaluate the role tourism and outdoor recreation marketing and development play in creating both positive and negative environmental and cultural resource impacts.
- D. Expand coordinated state review efforts of new development plans on state lands (e.g. State Land Management Team).
- E. Continue existing programs focused on resource protection (e.g. Volunteer Lake Assessment Program, Lakes Lay Monitoring Program, DES Exotic Species Program, NH Living Legacy Project, State Conservation & Rescue Archaeology Program, etc.).
- F. Expand partnerships and initiatives aimed at promoting the use of recreational equipment that utilize cleaner, more environmentally friendly technologies (e.g. NH Clean Marine Initiative).
- **III.Objective**: Address long-term stewardship issues on existing parcels and when parcels are protected or developed.

Strategies:

- A. (LWCF) Give priority to projects that have a prepared stewardship plan in place.
- B. Continue to address enforcement and enforceability of existing environmental laws (e.g. support increased enforcement by State agencies and examine existing limitations given current staff and funding levels).
- C. Encourage and assist landowners in preparing stewardship plans on existing parcels.
- D. Emphasize the importance of stewardship when lands are protected by the state, municipalities and other organizations (e.g. LCHIP requires a stewardship plan to be developed in order to receive grant funding for fee-owned lands and easements.).

- E. Utilize and promote technical assistance programs for providing consultation when parcels are protected (e.g. Center for Land Conservation Assistance, local land trusts, NH Coalition for Sustaining Agriculture, OSP).
- F. Develop partnerships with recreational user groups to steward lands.
- G. Improve information and educational efforts aimed at addressing stewardship concerns and issues faced by both public and private entities.

SELECTED CONTACTS & INFORMATION SOURCES

National Center for Recreation & Conservation

National Park Service, Rivers Trails and Conservation Assistance Program

Land and Community Heritage Investment Program

DRED – Division of Parks and Recreation

New Hampshire Fish and Game Department

New Hampshire Department of Environmental Services

Society for the Protection of New Hampshire Forests

The New Hampshire Association of Conservation Commissions

New Hampshire Fish and Game Non Game and Endangered Wildlife Program

New Hampshire Natural Heritage Bureau

New Hampshire Chapter of the Nature Conservancy

Audubon Society of New Hampshire

New Hampshire Lakes Association

PROVIDING DIFFERENT, SOMETIMES COMPETING, RECREATIONAL OPPORTUNITIES

SUMMARY

- New Hampshire needs local, close-to-home recreational opportunities, especially alternatives to those opportunities marketed as tourist destinations.
- Issues and conflicts can arise when multiple activities compete for the same resources. This is particularly evident along trails and on public waterways.
- There is a tendency to place restrictions or limits on use as pressure increases or conflicts develop.
- The resource and recreation management concerns may vary depending on location in the state. Concerns may be more related to impacts of tourism in the northern half of the state, and more related to increased development pressure and population growth in the south.
- Universal Design must be considered as recreational opportunities are developed or improved by both state and federal law.
- According to the *Statewide Outdoor Recreation Needs Assessment* (UNH, 1997) some of the most broadly popular activities in the state include wildlife viewing, walking/jogging/running, picnicking, day hiking, and swimming. These activities tend to be globally popular because they are unstructured, require little facility "development", require no specialized gear or skills, and can be enjoyed by young and old alike. Many of these activities take place close to home.
- US data shows that participation in most outdoor recreational activities is on the rise, either due to population increases, increases in popularity or both (Cordell et. al, 1999). This suggests that both recreational facilities and acquisition of lands for a range of activities are needed.
- New equipment and technology are expanding the type and range of activities people enjoy. (Cordell et. al, 1999).
- Wheeled OHRV registrations in New Hampshire have more than doubled in the last 7 years (NHFG, 2002).
- Nearly 50 percent of respondents to the *Statewide Outdoor Recreation Needs Assessment* (UNH, 1997) agreed or strongly agreed that outdoor recreation areas in New Hampshire are too crowded.
- Forty six percent of respondents in this same 1997 survey indicated that they would be willing to pay higher user fees if the increase would be dedicated to maintenance, acquisition and development of recreation programs and properties.
- The 1997 *Comprehensive Statewide Trails Study* completed by the Office of State Planning found that existing trails are inadequate to meet the current range of recreational activities.

OVERVIEW

Planning for recreation requires the consideration of many factors, including an understanding of changing environmental, cultural, economic, social, and technological

conditions and trends. A number of sources explore these trends and changing conditions. According to *Park, Recreation, Open Space and Greenway Guidelines* (1996) published by the National Recreation and Park Association and the American Academy for Park and Recreation Administration there are numerous trends that impact outdoor recreation planning. Examples include a greater focus on preserving natural resources, increased citizen participation in decision making, an aging society, great strides in information technology (e.g. internet), and increased focus on growth management.

Outdoor Recreation in American Life, A National Assessment of Demand and Supply Trends (Cordell et. al, 1999) underscores the need to address increased recreational use, changing participation patterns, and the potential for greater conflicts of use. This reports states that recreation providers should expect that the most popular sites will experience greater and greater congestion in the future and that there will likely be more conflicts among recreationists as they vie for use of the same areas at the same times. Pressure is expected to be particularly heavy at already popular water sites, especially with advances in technology. Travel and tourism should continue to grow as long as transportation and access to resources remains affordable and available.

Other predicted trends identified in this report include the following: access to both developed sites and dispersed areas will become an ever more important management issue; cultural and socio-economic changes will continue to change the type of demand for recreation opportunities; and the number of organized groups (representing a wider variety of outdoor recreation interests) will continue to grow and will have an increasingly large voice in public land management.

Universal Design and Accessibility

Beyond general trends, recreational providers, by law, must consider the universal accessibility of recreational opportunities. With the passage of the Americans with Disabilities Act (ADA) in 1990, communities were given the legal responsibility to provide a reasonable level of access to all users of public facilities and programs. This includes access to public park and recreation facilities. Guidance for facility design can be found via national standards and guidelines.

In September 2002, the US Access Board, under the ADA, issued a set of guidelines for recreational facilities, entitled <u>Accessibility Guidelines for Buildings and Facilities;</u> <u>Recreation Facilities.</u> More general information about the Americans with Disabilities Act can be found at the US Department of Justice (DOJ). The DOJ provides access to wide range of information and technical assistance about the ADA, including a link to <u>ADA Standards for Accessible Design</u>. Another resource of interest to communities may be the <u>ADA Guide for Small Towns</u> (DOJ, 2000). This booklet, available online, provides an overview of some basic ADA requirements and provides cost-effective tips on how small towns can comply with the ADA.

In New Hampshire, the Governor's Commission on Disability provides information and education about the American's with Disability Act and other regulations that affect

citizens with disabilities. The Commission's stated mission is to 'remove the barriers, architectural or attitudinal, which bar persons with disabilities from participating in the mainstream of society'.

The <u>Architectural Barrier-Free Design Committee</u> of the Governor's Commission on Disability (under RSA 275-C and RSA 155:39) writes, distributes and enforces the Architectural Barrier-Free Design Code for New Hampshire (ABFDC-NH). The ABFDC-NH adopted the Americans With Disabilities Act Accessibility Guidelines, effective January 1, 1994.

NEW HAMPSHIRE CONDITIONS AND TRENDS

As population grows, tourism remains strong, and participation rates for many activities continue to rise, New Hampshire and its communities must consider how to provide for an increasingly diverse range of outdoor recreational activities. This includes providing outdoor recreation experiences in tourist destinations along with more localized efforts that provide residents with opportunities close to home. According to the Statewide Outdoor Recreation Needs Assessment conducted by the University of New Hampshire in 1997, about 50 percent of all outdoor recreation activities take place within 10 miles of home.

Local opportunities for outdoor recreation, particularly human powered recreation, can be important aspects of encouraging physical activity and promoting a healthy lifestyle. Providing close-to-home, convenient opportunities for walking or biking, for instance, helps to incorporate outdoor recreation into people's daily lives, instead of just as a weekend or occasional hobby. This helps ensure that participation takes place not only when one travels to a destination, but also when one walks down the street or out the front door. Trails, paths, and bikeways have dual impacts. Pathways serve as a recreational opportunity in and of themselves, and provide important connector or transportation linkages between other local resources.

According to a 1995 National Park Service report titled *Economic Impacts of Protecting Rivers, Trails, and Greenway Corridors*, there are numerous economic benefits of trails and greenways, such as increased property value of nearby homes. In addition to property value increases, studies have shown that trail users spend money on food, beverages, camping, hotels, and bike rentals, which stimulates the local economy. Throughout the state, dozens of regional and community-based trail groups have sprung up. Local conservation commissions are also increasingly becoming involved in the development of trails and greenways.

Tourism and Recreational Use

Outdoor recreation areas marketed as destinations provide an important source of tourism related income for the state. Tourism related dollars are generated both from in-state visitors as well as out-of-state visitors and are an important part of the economy. These destinations, such as the trails and scenery of the White Mountain National Forest and Mount Monadnock, the beaches of the Seacoast, and the clear lakes of the Lakes Region,

help define the character of the state and are an important reason why residents call New Hampshire home.

A recent forum sponsored by the NH Historical Society and the Society for the Protection of New Hampshire Forests was held to discuss the history and future of the state's tourism industry. In particular there was discussion about tourism promotion and the importance of managing for potential impacts of tourism growth and development. There was broad awareness and recognition of the important role our natural and cultural resources play in the continued health of our state's tourism industry. If these resources are ignored, our tourism industry and our quality of life will be impacted.

The importance of the topic was underscored by the broad organizational representation at the table. The Business and Industry Association, Lodging and Restaurant Association, Monadnock Conservancy, Plymouth State University, University of New Hampshire, and North Country Resource Conservation and Development were on the panel itself, and the audience consisted of a range of agency, non-profit and business interests.

A fair number of state residents are concerned about existing use levels of recreational areas and a substantial number would pay higher fees to alleviate pressure and impacts of use. Nearly one-half of respondents in a *Statewide Outdoor Recreation Needs Assessment* (UNH, 1997) agreed or strongly agreed that outdoor recreation areas in New Hampshire are too crowded. Forty-six percent, in this same survey, indicated that they would be willing to pay higher user fees if the increase would be dedicated to maintenance, acquisition, and development of recreation programs and properties.

In this 1997 study, three destination areas in the state (White Mountain National Forest, Lakes Region, and Seacoast) were examined individually to explore perceptions of crowding and use. Almost 89 percent of residents have visited the White Mountain National Forest (WMNF). While almost all (96 percent) still rate their last visit as good or excellent, about 23 percent said the environmental conditions in the WMNF are declining and almost 32 percent said crowding and congestion are becoming a bigger problem. Nearly 19 percent indicated that they use the WMNF less now in response to crowding.

Almost 81 percent of state residents have visited the Lakes Region of New Hampshire. Most ranked their last visit as either good (55 percent) or excellent (33 percent). Similar to the WMNF, about 24 percent of respondents said the environmental condition of the Lakes Region is declining. Almost 43 percent indicated that crowding and congestion are becoming a bigger problem in this area, with about 17 percent saying they visit the Lakes Region less in response to crowding or congestion.

Approximately 84 percent of respondents have visited the Seacoast. About 53 percent rated their last visit as good and 27 percent excellent. Again, similar to the other two areas, about 22 percent indicated that environmental conditions of the Seacoast are declining. Nearly 44 percent said that crowding and congestion are becoming more of a

problem in this area and 25 percent of residents visit the Seacoast less now because of this.

These three profiles suggest that while residents still view these experiences positively, a significant number of state residents are becoming sensitive to crowding and congestion, in some cases changing their visitation patterns. As use continues to grow or expand in these areas, these issues could become more pronounced and will pose challenges to recreation providers. These trends also suggest that the visitor profiles of these regions may be changing as well.

While many resource and recreation management concerns may be statewide, some may be more evident in one area of the state than another. For example, many communities towards the northern part of the state tend to be dominated by large tracts of publicly owned lands such as the White Mountain National Forest, or large tracts of unfragmented privately held lands. Tourism promotion, the impacts of recreational use, and the management decisions made on these lands are all of great importance to local communities. Comparatively, there much less publicly held conservation land in the southeastern part of the state, and the sheer number of large un-fragmented parcels is dwindling. Communities in the southeast must increasingly deal with issues surrounding growth, including loss of open space, loss of community character, and increased development pressure.

Existing Plans

There are several existing State plans that provide guidance and direction for addressing specific recreation needs. These plans reflect a great deal of collective wisdom and knowledge in the state, and provide guidance for addressing recreation issues in the SCORP.

Keeping Lands Open to the Public. The 1996 *New Hampshire Forest Resources Plan*, produced by the Forest Resources Plan Steering Committee and the DRED Division of Forests and Lands, identifies a host of action strategies aimed at sustaining New Hampshire's forests and forest economy. One specific action step identified in the plan focuses on continuing the tradition of keeping lands open to the public. Public use generally includes low-impact activities such as hiking, bird watching, fishing, hunting, snowshoeing, and cross-country skiing.

The plan recognizes that New Hampshire has a long held tradition of public use of private lands for recreation, but that changes in land use and liability concerns are restricting these opportunities. Smaller parcel sizes and increased posting due to fear of liability raised concern that these trends would increase pressure on existing public lands, some of which already experience a great deal of use. This increased use of public lands, in turn, may negatively impact both the natural resource base and the recreational experience

The plan suggests the continued promotion of recreational use of private lands by addressing landowner concerns and statewide recreational opportunities. Sample action

steps identified in the 1996 plan include continuing efforts to build coalitions between forest landowners and people who recreate on private lands, provide information about the rights and responsibilities of forest landowners in education programs, and develop programs on responsible use. These concerns mirror those identified by the SCORP Public Advisory Committee and give credence to continuing efforts to address issues related to public use of private lands in the SCORP.

This emphasis is supported by a 2001 survey completed for the Statewide Program of Action to Conserve our Environment (SPACE) by the University of New Hampshire Survey Center. This survey found that 55 percent of Current Use landowners cite recreational use as the number one public benefit they provide (a 19 percent increase from the 1993 survey). About 59 percent of Current Use landowners indicated that their land is not posted against hunting, fishing, hiking, snowshoeing, skiing, or nature observation. Forty-four percent indicated their land is being used most frequently for 'recreational uses', compared to 37 percent who indicated their land is primarily used for 'extractive uses' (e.g. forestry) and 19 percent who indicated "passive uses" (e.g. wildlife habitat).

As background, the Current Use Taxation Program, under RSA 79-A, was established in 1972 to:

"...encourage the preservation of open space, thus providing a healthful and attractive outdoor environment for work and recreation, maintaining the character of the state's landscape, and conserving the land, water, forest, agricultural and wildlife resources".

Under this program, parcels of land (10 acre minimum) are taxed based on their current use value as open space (e.g. active farm or forest land) rather than on their potential value for development purposes.

Under New Hampshire's Current Use Program landowners can also accept an additional 20 percent "recreation adjustment" to their taxes. This recreation adjustment lowers a landowner's tax burden by an additional 20 percent if the land is kept open to the public for traditional forms of recreation. As defined by RSA 79-A, the six traditional forms of recreation consist of skiing, snowshoeing, fishing, hunting, hiking, and nature observation; available year-round unless these activities are detrimental to crops on agricultural lands or active forestry operations.

Water Access. In 1991 OSP developed and published the *Public Access Plan for New Hampshire's Lakes, Ponds, and Rivers* in conjunction with the then-called Public Access Advisory Committee. It includes an evaluation of past and future access efforts and provides a series of recommended strategies for identifying priority sites and sources of funding for improving public access in the state. The plan provided a detailed set of recommendations related to administrative needs, funding, and 10 different goals related to improving water-related access. Some examples of main goals include: to provide and improve year-round access, including for those who are disabled; to provide access

for boaters and non-boaters alike; to minimize abutter conflicts; to identify, analyze and minimize environmental impacts associated with public access; and clearly define roles of public and private access providers.

Two recommendations identified in the Public Access Plan have since become law. In 1992, the New Hampshire legislature passed RSA 233-A, which established the New Hampshire Boat Access Program. The legislation also provides a non-lapsing dedicated fund for public access development taken from a \$5 surcharge on boat registrations. The law allowed the NH Fish and Game Department to use the funding for the acquisition of lands for access, development of access facilities, and staffing. Another recommendation of the Public Access Plan, also an important aspect of RSA 233-A, is the establishment of a Public Water Access Advisory Board (PWAAB). The Board is comprised of 19 individuals representing State agencies, hunters, fishermen, lake and river associations, and various boating groups. This Board is charged with advising and monitoring all state agencies in their efforts to increase and expand access to New Hampshire's public waters.

Over 10 years have passed since the Public Access Plan was developed. Given the changes that occur over time, the priorities, recommendations and strategies set forth in this 1991 plan should be reviewed by the New Hampshire Fish and Game Department and the Public Water Access Advisory Board (PWAAB) to determine accomplishments to date, and reaffirm or revise priorities, goals and strategies for the next few years.

Trails Issues. The Office of State Planning, in cooperation with the Department of Resources and Economic Development, produced a *Comprehensive Statewide Trails Study* in 1997. This study served as an update to the 1974 Trails Study and was an outgrowth of the 1993-1999 SCORP. This study was completed with input and guidance from the Statewide Trails Advisory Committee. The New Hampshire Statewide Trails Advisory Committee, authorized under RSA 216-A, was established to advise DRED and the Commissioner on matters related to state trails. Membership includes a variety of interests from State agencies, motorized and non-motorized trail user groups, and non-profit organizations. This Committee helps improve coordination between agencies and recreational trail user groups and inform State decisions related to trails planning and development.

An important part of Comprehensive Statewide Trails Study planning effort included the development of statewide issues, goals, and recommendations related to trails. Issues identified related to several main categories including the protection of resources, user needs, compatibility of trail activities, trail maintenance, funding, laws, and municipal trails. Some main recommendations of this 1997 study included: encouraging the development of trail corridors to accommodate the needs of different trail users; encourage trail organizations and towns to work with land trusts to protect trail and greenway corridors; encourage links between places where people work, live and play; encourage towns and communities to develop trails within 15 minutes of home; and develop trail monitoring plans for evaluating trail maintenance needs on trail systems. These examples, along with others identified in the plan remain pertinent today and serve as an important foundation for addressing trail issues in the SCORP.

Issues related to trails are not always about competing *recreational* uses. For instance, many tracts of undeveloped land in New Hampshire are working forestlands. These lands provide forestry-related income to landowners, and many also offer public recreational opportunities. Active forestry on lands open to the public can sometimes impact recreational experiences. Trails may be closed for a period of time during active harvesting, or harvesting along existing trails can change the look and aesthetic appeal of an area. Issues can arise on publicly and privately held lands.

For example, in a town forest in southern New Hampshire, a municipality recently decided it was time to harvest timber and had a forest management plan developed. In the time since the town had acquired the parcel some ten years before, the town forest had been used primarily as a public recreation area for hiking, bird watching and cross-country skiing, etc. Trails were developed and marked for recreational use. When harvesting began, little explicit consideration was given to the existing recreational use of the property. The resulting cut had significant visual impacts on the property, especially as viewed from these public trails. This created conflict and disagreement in town over the purpose and management objectives of the land.

While no single prescription exists, some interested landowners are giving consideration to trail buffers as a way (management strategy) to help protect recreational corridors. Trail buffers might, for instance, limit or restrict forestry along existing trails or planned trails. Under such a scenario a landowner could, for example, agree to maintain a buffer of 50' or 100' along an existing recreational corridor, and limit forestry within this buffer zone to salvage cuts only. Such a tool helps protect existing the recreational opportunities (e.g. hiking, cross country skiing, etc.) by protecting the aesthetic appeal, while still maintaining a majority of a property's use as a working forest.

Motorized Access

Issues related to motorized access have become even more pronounced since the publication of the *Comprehensive Statewide Trails Study* five years ago. Use of wheeled off-highway recreation vehicles (OHRVs) is becoming an increasingly popular recreational activity in New Hampshire, as evidenced by the fact that wheeled off-highway recreation vehicle registrations in New Hampshire have more than doubled in the last seven years. A growing number of ATV clubs (20 or more) have formed across the state and New Hampshire now has a statewide association (Granite State ATV Association) championing rider issues and concerns.

While a relatively small proportion of people participate in wheeled OHRV activities as compared to non-motorized activities, it's increasing popularity and its relatively large impact on other use or interests demands increased attention from managers. Ignoring the growth of these recreational uses would only create greater management challenges and greater controversy in the future. Compounding this increase in resident interest is the growing trend towards restricting wheeled OHRV use in nearby states such as Massachusetts and Maine. Managers feel that wheeled OHRV policies in other states may be diverting additional use into New Hampshire.

A wide variety of opinions about wheeled OHRV management exist in New Hampshire. Some view existing trail and wheeled OHRV area access as insufficient given the growing demand and substantial registration fees paid by OHRV users. They feel that more state resources and wheeled OHRV fees should be directed to expanding and improving access for wheeled motorized access.

Others view wheeled OHRV use as a growing statewide problem and concern. Existing use is seen as detrimental to the environment (wetlands, wildlife, air pollution) and trail conditions, and negatively impacts other interests (other trail users, abutters). There is also growing concern over trespass, litter, safety, and problems with enforcement on privately and publicly held lands. There is concern that the State is paying too much attention to this use and will ultimately promote and expand OHRV use across the state.

Several communities, especially in the southern part of the state are expressing concern and frustration over growing OHRV use and their lack of control over this use. There is also a concern over the lack of State enforcement (NH Fish and Game) available to address trespass and safety issues, among others. This lack of State funding for enforcement is seen as placing a disproportionate burden on local law enforcement. There is a fear that growing recreational use and continued lack of local control will only exacerbate already problematic local issues in the future.

Legislation. Increased use and demand for motorized trail access heightens the need to better understand the needs of these users, the relationship of ATV/Trail Bike use to other uses, impacts on existing trails, other trail users, and the resource base. A new state law (House Bill 1273), passed in 2002, is beginning to address these issues more directly.

House Bill 1273 (Chapter 233 of the Laws of 2002) provides legislative guidance for planning and procedures related to state-owned or leased trails for all-terrain vehicles (ATV) as well as off-highway recreational vehicles (OHRV) registrations. A key aspect of the new law includes a mandated ATV and Trail Bike Trails Plan. The plan is to be completed by the end of 2003 and updated every five years thereafter. The plan must emphasize self-contained trails and include the following components:

- a. Provide an inventory of the ATV and trail bike trails open to the public in the state, including the length and condition of the trails, persons or organizations responsible for maintenance, funding levels for maintenance, and estimated ATV and trail bike use.
- b. Provide an assessment of the amount of ATV and trail bike trail expansion required to reasonably accommodate the public need in the next five years.
- c. Propose additional sites of strategically located lands where public/private partnerships will allow development of ATV and trail bike trails.
- d. Propose sites for the acquisition by the state of strategically located lands for the development of ATV and trail bike trails.

e. Assess the level of funding necessary for grants-in-aid and purchases of land, easements, and rights-of-way for the purposes of the 5-year plan, and make recommendations for fee structure changes to the legislature.

The Department of Resources and Economic Development is in the process of soliciting proposals for plan development.

Other Approaches. New Hampshire is not alone. Many states are grappling with wheeled OHRV management issues. Recognizing the increased growth of motorized use and the challenges surrounding this growth, the State of Minnesota recently constructed a designated OHRV area, reusing old iron mine lands. This project improves access for recreational users while minimizing environmental damage to public lands. The old mine area, along with good engineering and design, allowed managers to develop a recreation areas specifically designed to handle impacts of wheeled motorized use. This project, while priced at \$2.5 million, was entirely funded by user fees. Consideration should be given to exploring the feasibility or possibility of such a facility in New Hampshire.

CASE STUDY - MINNESOTA

The Iron Range Off-highway Vehicle Recreation Area, authorized in 1996, is located on former mine lands in northern Minnesota. This user-funded \$2.5 million facility will be operated year-round by DNR Trails and Waterways as a designated State Recreation Area. It features over 30 miles of recreational trails, scramble and competitive event areas that are specially designed for off-road motorcycles, all-terrain vehicles, and 4-wheel drive jeeps and trucks. A classroom building and two moto-cross training tracks will also be constructed for practice riding and instruction, and for use in hosting special events throughout the summer riding season. (Source: News Release, Minnesota DNR, 2002)

Fee and Non-Fee Activities

This discussion about the State's management of OHRV use brings to light a larger issue; that of how to manage for recreational activities with user fees versus those without user fees. Some feel that the State's attention and focus on these two broad classes of activities is out of balance, though there are perspectives on both sides of the issue. There is one general perspective that the silent majority (e.g. wildlife watchers, hikers, bicyclists, non-motorized boaters, etc) has too small of a voice in resource management decisions. The feeling is that more attention should be placed on preserving the more popular non-fee activities instead of the less popular fee-based activities (OHRV, motor boating, etc.).

Some feel the State focuses attention on supplying opportunities for fee-based activities but does not fully recognize the negative impacts these activities can have on other uses. Some feel the State is even promoting fee-based use because it is a revenue source. The

concern is that continued promotion of certain fee-based activities could ultimately damage the majority's ability to enjoy these other more popular (non-fee) activities.

There is another broad perspective, however, that recreationists who pay fees to participate in their activities should be given more State time and attention. Their fees should be used expressly to enhance and improve their ability to participate in these activities and state resource managers must be responsive to their needs. Some feel there still is not enough consideration given, based on the high fee rates charged, rather than too much consideration. Perspectives vary and discussions and debate about State management of fee and non-fee activities will likely increase in the future as recreation pressures and demand grow.

Local Open Space and Trail Planning

Many communities already identify, inventory, and plan for recreation needs, such as ball fields, playgrounds and bicycle paths, through their master planning process. In addition to this important planning effort, communities may also want to consider conducting an open space trails plan to identify and plan for open space (and trails) more explicitly. A recent manual, produced by the Central New Hampshire Regional Planning Commission (CNHRPC) is available to provide guidance.

The *Guide to the Development of a Municipal Open Space Trail System Plan* helps communities plan for a municipal trail system and to promote the conservation of lands of special significance. The guide provides recommendations for how to protect open space and create a trail system in a community. This is useful on a municipal level, and can also help neighboring communities develop a more regional approach to open space and trails development. Central New Hampshire Regional Planning Commission assisted seven communities in completing an open space trail plan between 1999 and 2001.

An open space trails plan consists of an inventory and maps of a town's existing conservation easements, public lands, rights-of-ways, and privately conserved lands, along with an inventory and maps of existing formal trails and informal trails. Examples include preserved private and public lands, lands that abut Class VI roads, snowmobile trails on private land, railroad corridors, and utility easements. Inventories and maps help a community decide upon new trails and provide a holistic view of the town's existing resources to aid the creation of an open space and trails network. The planning process is sensitive to issues of private property and landowner liability and attempts to minimize individual concerns over certain lands being identified in the plan.

Open Space Trail Plans can be adapted to meet the needs of individual communities and can be used alongside an existing Master Plan or adopted as part of a Master Plan. Such a plan can also provide recommendations for changes to a municipality's Site Plan Review Regulations or Subdivision Regulations. This guidebook is available on-line through the Central NH Regional Planning Commission.

RECOMMENDATIONS

Providing Different, Sometimes Competing, Recreational Opportunities

GOAL: Ensure that a variety of recreational opportunities are provided, even as pressures and potential conflicts may arise.

I. Objective: Protect existing outdoor recreation opportunities.

Strategies

- A. **(LWCF)** Focus efforts on major renovations of eroded or deteriorated facilities (e.g. boat ramps, playgrounds, etc.) and recreational areas (e.g. beaches, parks, trails, etc.).
- B. (LWCF) Protect existing access (e.g. water access, trails, trailheads, etc.) and preserve and maintain existing recreational areas (e.g. parks, playfields, etc.).
- C. Work with recreational clubs and organizations to produce and promote best management practices (BMPs) for different recreational uses (e.g. work with different trails groups to develop BMPs for trail development/maintenance).
- D. Encourage local stewardship of recreation areas/facilities.
- **II. Objective:** Support additional recreational opportunities to address existing problems or deficiencies.

Strategies:

- A. **(LWCF)** Give priority to projects that provide for identified public recreational needs and/or unavailable recreational opportunities.
- B. (LWCF) Give priority to projects that identify and address existing problems with over use or mitigate conflicts of use.
- C. Encourage the State and local communities to determine recreational needs by focusing on desired levels of service.
- D. Educate communities about existing legislation that can promote and designate local recreational opportunities (e.g. Class A and B Trails and 20 percent recreational adjustment under Current Use).
- **III.Objective**: Encourage keeping private lands open to the public.

Strategies

A. Build coalitions between landowners and people who recreate on private lands (e.g. SPACE, NH Timberland Owners Association, State Agencies, trail groups, etc.).

- B. Continue to encourage private landowners to keep their lands open to recreational uses via Current Use and its 20 percent Recreational Adjustment.
- C. Encourage interested landowners to properly sign their property based on acceptable uses (e.g. encourage an organization to provide landowners with signs that post for specific uses. Often landowners can only find (therefore post) generic 'No Trespassing' signs though the intent is to only limit a particular use. Making use-specific signs more readily available will help keep lands from being posted against all public access. Also encourage participation in the NH Fish and Game sign program).
- **IV. Objective:** Promote the use of education and information-based strategies to manage or avoid conflict.

Strategies

- A. Encourage shared use and cooperation among different recreationists by incorporating educational messages into maps, guides, and public information sources (e.g. NH Fish and Game Public Access Sites map, NH Horse Council brochure, "Share with Care" program, etc.).
- B. Support ongoing public education efforts focused on enforcement of existing recreation-related laws and penalties (e.g. continue mandatory education programs on boating laws, OHRV laws, hunting laws, etc.).
- C. Improve public access to recreational information, especially via the web, to increase awareness of available recreational opportunities statewide (e.g. examine the feasibility of placing OSP's Inventory of Outdoor Recreation Facilities or Public Water Access sites on the web).
- D. Develop a resource directory that provides information about who's responsible on a statewide level for different recreation programs and enforcement.
- **V. Objective:** Ensure that recreational opportunities are available to those with disabilities.

Strategies

- A. Involve persons with disabilities in the planning of new and/or the rehabilitation or modification of existing outdoor recreation facilities and programs (e.g. DOT, Governor's Commission on Disability, Granite State Independent Living, etc.).
- B. Develop a guidebook to outdoor recreation facilities that provides information for persons with disabilities about accessibility levels.
- C. Provide technical assistance and incentives to recreation providers to improve accessibility of recreational facilities and lands (e.g. US Fish and Wildlife Service enforcement of ADA accessibility, Governor's Commission on Disability).

- D. Identify funding sources that can be used to improve accessibility and universal design (e.g. TEA-21, LWCF, etc.).
- E. Work with partners to support and encourage universal design.

SELECTED CONTACTS & INFORMATION SOURCES

DRED - Division of Parks and Recreation

DRED – Trails Bureau – also provides links to many trail clubs

Governor's Commission on Disability

Granite State Independent Living

New Hampshire Department of Transportation – Bicycle/Pedestrian Program

New Hampshire Fish and Game Department

New Hampshire Recreation and Park Association

New Hampshire Office of State Planning

Regional Planning Commissions

White Mountain National Forest

Appalachian Mountain Club

US Department of Justice – ADA information

APPLY LIMITED FINANCIAL AND HUMAN RESOURCES TO ADDRESS A RANGE OF RECREATION NEEDS

SUMMARY

Funding is needed to support a wide range of local and state recreational opportunities. These needs include facility rehabilitation, new facility development. land acquisition for both organized (e.g. ball fields) and unorganized recreational opportunities (e.g. open space for hiking, bird-watching), as well as efforts focused on protecting important natural and cultural resources.

- Funding is needed to support statewide open space and greenway planning efforts.
- Enforcement and stewardship costs are often not fully considered when lands are protected.
- Human resources (partnerships, volunteerism), not only financial capital, are fundamental to successful local recreational efforts.
- In a 2002 DRED survey, State Park Managers list major rehabilitation/facility construction as a more pressing funding need than new acquisition.
- Funding for natural and cultural resource protection is an important topic statewide and locally as underscored by the broad-based support for LCHIP, increased role of local/regional land trusts, and increased emphasis locally on land protection (open space bonds, local conservation funds).
- In the *Statewide Outdoor Recreation Needs Assessment* completed by the University of New Hampshire in 1997, survey respondents listed programs and initiatives aimed at land, water and species protection as higher overall funding priorities than those related to recreation development.
- In this same survey, funding for non-motorized recreation was listed as a higher priority statewide than funding for motorized recreation or recreation opportunities that require a high level of development.
- In a 1997 OSP survey, community recreation leaders rated ball fields most often as the number one facility needed in their community, followed by outdoor ice-skating rinks and bicycle trails. Ball fields also ranked #1 in the 1993 and 1987 versions of the survey.

OVERVIEW

High quality recreation requires an investment of both financial and social capital. Resources are needed for adequate planning, new acquisitions, ongoing maintenance, or facility refurbishment, as well as long-term stewardship and enforcement. All of these are legitimate needs and have merit. However, external grant funds are always limited and often target only certain needs or priorities. The challenge remains to find ways of creatively financing recreation in communities, and making use of a wide range of volunteer and non-financial resources that has the potential to be tapped.

FEDERAL, STATE, AND LOCAL FUNDING

A number of federal and statewide programs exist that provide funding and resources to assist in open space and recreation funding.

Federal

LWCF. The Land and Water Conservation Fund (LWCF) Act of 1965 (Public Law 88-578, 78 Stat 897) was enacted "...to assist in preserving, developing, and assuring accessibility for all Americans" to outdoor recreation resources. The LWCF program provides matching grants to States, and through the States to local governments, for the acquisition and development of public outdoor recreation areas and facilities. At the federal level, the program is administered by the National Park Service of the Department of the Interior. At the state level, the LWCF is administered by the New Hampshire Department of Resources and Economic Development (DRED), Office of Recreation Services. This program provides matching grant funding to state parks and communities.

The LWCF represents the major source of federal funding for outdoor recreation and land acquisition. Enacted by Congress in 1965, the Act contains two components: (1) it is the source of federal funding for additions of lands to the National Park System, National Forests, Wildlife Refuges, Trails, Wild and Scenic River systems, and public lands administered by the Bureau of Land Management; and (2) it is a source of federal grants to State and local governments for open space and recreation planning, land acquisition, and the development of outdoor recreation facilities.

TEA-21. The Transportation Equity Act for the Twenty First Century (TEA-21), signed into law in 1998, is a continuation of the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA). Administered federally through the Federal Highway Administration, TEA-21 continues and improves upon programs of ISTEA and provides new initiatives aimed at both enhancing communities and the natural environment.

Several programs within TEA-21 provide funds focused on enhancing recreation opportunities and/or transportation alternatives. The <u>Transportation Enhancements</u> (TE) program, administered in New Hampshire by the Department of Transportation, provides funding to promote alternative transportation and more livable communities. Projects include a variety of initiatives including sidewalks, multi-use paths, bicycle lanes, acquisition of rail line, and the renovation and reuse of historic transportation buildings (depots, etc.)

Recent examples include a project in Lincoln where 2.5 miles of sidewalk and multi-use path were constructed along the Kancamagus Highway, a project in Nashua (Manchester Street) that connected sidewalks from schools to surrounding neighborhoods and improved safety for pedestrians of all ages, and the acquisition of 43.2 miles of the Cheshire Branch Railroad corridor in the towns of Fitzwilliam, Troy, Marlborough, Swanzey, Keene, Surrey, and Walpole.

The <u>Recreational Trails Program</u>, administered in New Hampshire through the Bureau of Trails in the Department of Resources and Economic Development, provides funding for motorized, diversified, and non-motorized trails. Funding can focus on new construction, maintenance and restoration, fee acquisition, or easements for new trail corridors.

In order to receive funding, all states must establish a State recreational trails advisory committee that represents both motorized and non-motorized recreational trail users. Federal requirements mandate that states administer funds so that 30 percent are used for motorized use, 30 percent for non-motorized use, and 40 percent are used for diversified trail uses. The program provides 80 percent of the total project cost and soft match or inkind match is allowed. New Hampshire received approximately \$535,000 in 2002. Trail grants range from a minimum of \$1,000 to a maximum of \$20,000.

The National Scenic Byways Program is coordinated in New Hampshire through the Scenic and Cultural Byways Program at the Office of State Planning. The New Hampshire Scenic and Cultural Byways Program was established in 1992 under RSA 238:19, "... to provide the opportunity for residents and visitors to travel a system of byways which feature the scenic and cultural qualities of the state within the existing highway system, promote retention of rural and urban scenic byways, support the cultural, recreational and historic attributes along these byways and expose the unique elements of the state's beauty, culture and history."

New Hampshire has over 1000 miles of road designated as Scenic Byways, including the White Mountain Trail, a 100-mile National Scenic Byway. Designation to this national or statewide network makes a byway eligible for earmarked federal TEA-21 funds that provide funding to byways for projects such as upgrading bicycle or pedestrian facilities, protecting byway resources, or developing promotional material. Sample projects in New Hampshire include byway gateway centers in the Seacoast and in Lincoln, a corridor management and promotion project for the Connecticut River Byway, and the production of byway maps and brochures.

<u>Forest Legacy</u>. The Forest Legacy Program is administered through the USDA Forest Service in cooperation with State Foresters. The <u>DRED</u> - <u>Division of Forests and Lands</u> is the main contact in New Hampshire. The program protects important working forestlands threatened by conversion to non-forest uses by purchasing rights to restrict development of the land, or through outright purchase from willing sellers.

Forest Legacy funds have been leveraged with other funds and contributions to protect large tracts of working forest land in the state, including the 141,400 acre Connecticut Lakes Headwaters easement, and the 10,000 + acre Pond of Safety lands in Randolph. This program continues to play an important role in funding the protection of working forestlands and un-fragmented open space in New Hampshire.

New Hampshire Coastal Program. The New Hampshire Coastal Program is administered through the Office of State Planning. The program's stated mission is to "balance the preservation of natural resources of the coast with the social and economic

needs of this and succeeding generation." Providing for public access to coastal lands and waters is listed as one of five major goals of the program.

Technical assistance grants are available to the Rockingham Planning Commission and the Strafford Regional Planning Commission to provide assistance to the 17 coastal communities in planning efforts such as master plan updates and local development ordinances. Competitive grants are also available to coastal communities for resource planning and management, education and outreach, and construction or property acquisition. One recent recreation-related example includes a \$100,000 grant to the city of Portsmouth. Monies will be used to stabilize a portion of the Pierce Island's eroded northern shoreline and develop a pathway and three waterfront overlooks to improve recreational use.

New Hampshire Estuaries Project. The New Hampshire Estuaries Project, also administered through the Office of State Planning, is a joint local/state/federal program established under the Clean Water Act. The main goal is the protection and enhancement of estuarine resources identified to be of national significance by formulating and implementing a realistic management plan for the area. Grants are focused on implementing high priority aspects of the management plan, a number of which deal with open space and shore land protection efforts. These grants are available to municipalities, local community groups, environmental/watershed associations, non-profit organizations, schools and educational institutions, county conservation districts, and regional planning commissions within the coastal watershed.

State

Land and Community Heritage Investment Program (LCHIP). The stated intent of the program is to "...conserve and preserve this state's most important natural, cultural, and historical resources, through the acquisition of lands, and cultural and historical resources, or interests therein, of local, regional and statewide significance, in partnership with the state's municipalities and the private sector, for the primary purposes of protecting and ensuring the perpetual contribution of these resources to the state's economy, environment, and overall quality of life".

LCHIP was established in May, 2000 with the passage of Senate Bill 401 (now RSA 227-M). This competitive grants program provides a 50/50 match to communities and non-profit organizations for natural, cultural and historic resource protection. The Legislature appropriated \$12 million to the program for the 2002-2003 biennium. The level of funding is still uncertain for the 2004-2005 biennium. Project examples include a grant to the town of Merrimack to support the acquisition of 544 acres of open space, one of the last remaining open space areas in town, and a grant to the town of Boscawen to rehabilitate and restore the 1866 Penacook Academy. In the second grant ground, completed in March 2002, almost \$3.8 million in LCHIP funds were awarded. These grant monies helped to protect over 4000 acres of conservation lands and assist in the acquisition, restoration, or future study of 19 historic structures.

Moose Plate. The New Hampshire General Court, under RSA 261:97-c, established the Conservation License Plate Program, also know as the Moose Plate Program, in 1998. The purpose of this volunteer program is to enhance existing conservation and preservation efforts via the sale of special license plates. Revenues are used by State agencies for the following purposes:

- Preserve or purchase significant publicly owned historic properties, archaeological sites, artifacts or articles.
- Research and manage non-game wildlife species as well as native plant species. Efforts also focus on public education of these species.
- Grants for county, municipal or non-profit conservation projects.
- Expand the roadside wildflower program.
- Assist in administering the Land and Community Heritage Program (LCHIP).

Beyond providing critical funding needed to administer LCHIP, a portion of the license plate receipts is used for a small grants program. The Conservation License Plate Grants Program utilizes a portion of the conservation license plate funds for local and regional conservation projects. Funds are available for resource conservation, education and outreach, and improvements to conservation areas. Applicants are pooled into one of two categories. The first category grants awards to communities, conservation related non-profits, and schools. The second grants awards to conservation districts and county extension offices.

In 2002, the State Conservation Committee through the Rockingham County Conservation District awarded its first allocation of funding from the conservation license plate program. In all about \$90,000 worth of grants were awarded in 2002. The Committee estimates approximately \$150,000 may be awarded this coming year. Eligible projects vary widely and reflect a broad range of conservation related initiatives. While some projects focus strictly on resource protection efforts, others relate to enhancing low impact recreation opportunities on conserved lands. Two specific projects funded this past year include developing a public water access and resource guide to a watershed in southeastern New Hampshire, and a trail/boardwalk design and construction project on school property. Grants tend to be small and focus on specific conservation projects that improve conservation land management or enhance conservation education rather than provide direct funding for land or easement purchases.

Grant-in-Aid Program. The Bureau of Trails, under the Department of Resources and Economic Development, administers a grant-in-aid program to provide assistance to organized, non-profit off highway recreational vehicle (OHRV) clubs and municipalities. The stated purpose of this program is to encourage development, maintenance, construction, grooming, and safety of OHRV trails in the State of New Hampshire. Monies may be used for the development and maintenance of OHRV trails on private, state, federal, and municipal lands. Grant-in-Aid funding for major trail construction and maintenance requires written landowner permission.

Local Financing

Parks, recreational facilities, and open space are important components of retaining community character, promoting health and wellness, and making a community livable. Communities have many tools available to help finance parks and open space, beyond external grant funds. The few discussed in more detail below are offered as options, or potential strategies, to be considered. Capital Reserve Funds, authorized under RSA 35, can be used to help communities to appropriate money for construction, reconstruction, or acquisition of capital improvements related to recreation or equipment. Recreation Revolving Loan Funds (RSA 35-B:2 II) allow communities to charge fees for recreation services and facilities, with all generated revenue then deposited into a special nonlapsing fund. The fund must be established by the municipality's legislative body, but can be expended by the recreation commission or other designated board without further approval. Not all tools will work or be supported in all communities.

Impact Fees. Impact fees, authorized under RSA 674:21,V, allow communities to assess fees on new developments and construction to help cover the costs associated with this new growth, including public recreational facilities. The fee must be directly proportional to the capital improvement needs related the new growth. Fees cannot be charged to correct existing deficiencies. Refer to the Office of State Planning's online reference library for additional information about impact fees.

Open Space Bonds. Open space bonds are receiving increased attention among New Hampshire communities, particularly towards the south. In areas of fast growth, land protection efforts are often outpaced by development. When a tract of open space goes on the market the local conservation commission does not always have the resources or the time to purchase the land or an easement outright. This is compounded by the fact that many landowners, who might be willing sellers and interested in conservation, do not have the luxury of waiting until the next Town Meeting to see whether the town can purchase the property.

Open space bonds can help to bridge this time gap by providing substantial, and more readily available, funds for pressing land conservation efforts. In 2001, several towns passed open space bonds of more than a \$1 million. Hollis, with a 91 percent majority, passed a \$3.5 million bond. Newmarket passed a \$2 million bond for conservation and recreation. Stratham overwhelmingly passed a \$5 million bond for land conservation. The sums are impressive and mark a new chapter in local land conservation efforts. While land protection efforts have many goals in mind beyond recreation, traditional recreational activities (hiking, cross country skiing, hunting, fishing, etc.) are often preserved along with the land itself. Conservation of open space is central to many popular outdoor recreation pursuits.

Stratham, Our Town

In March 2002, the Town of Stratham in Rockingham County went to Town Meeting to ask for a \$5 million open space bond. Sprawl and development pressure were out-competing land protection efforts and significant resources were needed to protect existing open space. The idea started with the Conservation Commission and grew into a grass roots effort called "Stratham, Our Town". The goal: to permanently protect 750 acres, or roughly one-third of Stratham's remaining buildable land. With a \$5 million bond paid back over 15 years, the residential tax increase was estimated at around \$1 per \$1,000.

The grass roots effort, spearheaded by a volunteer committee, targeted voters directly by increasing awareness through newsletters, direct dialogue, and public forums. The Selectmen and Town Manager were behind the effort and provided input, guidance, and technical assistance to aid the process. The campaign worked. The Town voted overwhelmingly (88 percent) in favor of the bond and these funds are seen as a cornerstone for fulfilling the town's open space and land preservation goals set forth in the Master Plan.

Land Use Change Tax – Conservation Fund. Under RSA 79-A communities can elect, by majority vote, to place a percentage or all of land use change tax monies into a conservation fund in accordance with RSA 36-A:III. Currently, about half of New Hampshire communities have tapped into this funding option. The land use change tax is applied when lands enrolled in Current Use opt out of the program. Some communities cap the percentage or total dollar value that can be added to the local conservation fund, others dedicate 100 percent of these local land use change penalties to conservation.

HUMAN RESOURCES

A great deal can be done with limited funds if in-kind human resources can be organized to make a project happen. Volunteer Friends of Recreation groups, for example, can be helpful to local recreation departments or commissions in fundraising efforts and in providing local recreation programs. These groups operate independent of town government and have more flexibility to initiate programs or special events and raise money for special recreation facilities or projects. These "friends of" groups are also important for State Parks. According to DRED's 2002 State Park Managers survey, about 50 percent of State Parks have a Friends Group or other volunteers associated with the park, such as snowmobile clubs, boy scouts, and garden clubs that aid the park.

Volunteer action and public/private partnerships are central in making local and statewide conservation goals a reality. Local land protection efforts are often based upon partnerships between local land trusts, local residents, community groups, and elected officials alike. Beyond making good practical sense by building upon individual

strengths, these partnerships are often attractive to external funding agencies/entities (e.g. LCHIP, LWCF). Many grant programs look for local collaborative efforts and partnerships as a sign of community commitment. Partnership and broad based support increase the likelihood that a project will be successful over the long term, and will be money well spent.

This rings true for larger-scale statewide efforts as well. The Connecticut Lakes Headwaters project reflects an effort that involves the collaboration of State agencies, legislators, the Governor's office, local communities, and a variety of private non-profit organizations. This impressive project, when complete, will protect 171,500 acres of land in the northern reaches of the state. These lands protect habitat for 67 rare species, protect large tracts of working forest, and protect opportunities for outdoor recreation. The State will purchase an easement on 146,400 acres of land to be owned and managed by a timber company. The State will also purchase 25,000 acres of the most sensitive habitat to be set aside as a natural area. The Nature Conservancy will hold an easement on these lands. Finally, the remaining 100 acres will be added to the State-run Deer Mountain Campground to expand recreational facilities.

The success of this project rests on both public and private efforts. Substantial public funds have been secured through state and federal sources. However private fundraising is needed to complete the project. The Nature Conservancy, Society for the Protection of New Hampshire Forests, and the Trust for Public Lands are jointly spearheading this campaign. Private foundations, major donors, and supporters are all being tapped to complete this effort.

The growth and expansion of trail clubs supporting both motorized and non-motorized recreational activities underscores the growing interest in many trail-based activities. These groups are not only involved in voluntarily maintaining trails, but are also key partners in securing access and developing trails. There are over 100 snowmobile clubs in the state, growing numbers of ATV clubs, outdoor clubs, statewide and regional bicycling organizations, equine clubs, rail-trail groups, and hiking trail organizations, among others. Efforts should continue to coordinate volunteerism within these groups and expand public/private partnerships.

Friends of the Northern Rail Trail

Volunteer groups often make up the difference between a good idea and a success story. In 1996, the State acquired 60 miles of the old Boston & Maine Railroad Northern Line for recreation purposes. But acquiring the corridor proved to be just the beginning. The old rail line needed a great deal of work before it could be transformed into a year-round rail trail. The State had funds available to assist in such efforts but lacked the staffing or resources to undertake the necessary trail directly. That is where the Friends of the Northern Rail Trail in Grafton County (FNRT) stepped in.

Using state recreational trail grant monies, private fundraising and foundation grants, FNRT paired these funds with a great deal of volunteer time and effort to start the corridor's transformation into a recreation trail. So far, through an impressive volunteer effort, a 23 mile section of trail starting in Lebanon is open to foot traffic, bicycling, skiing, horseback riding, and snowmobiling. Volunteers removed rail ties, decked bridges, re-graded existing surface, and in some cases resurfaced sections of the trail to make it accessible to year round use. The group has also prepared a Rail Trail brochure for distribution and will continue to work on the remaining sections of trail down to Boscawen. Without such a coordinated volunteer effort, the Northern Rail Trail would still be in its infancy.

RECOMMENDATIONS

Apply Limited Financial And Human Resources To Address A Range Of Recreation Needs

GOAL: Wisely use financial and human resources (e.g. volunteers, partnerships, youth programs, etc.) to meet a wide range of recreational needs.

I. Objective: Prioritize renovation/refurbishment funding of State Park facilities over new land acquisition.

Strategies

- A. (LWCF) Give priority to projects that have been identified in a State Park master plan or through other planning efforts.
- B. **(LWCF)** Encourage renovations that use Universal Design, environmentally friendly designs, reduce long-term expenses, or cost less to maintain (e.g. native vegetation, energy efficient materials, etc.).
- C. Continue to estimate the existing backlog of projects at a statewide level through a software program called Fixed Asset Resource Maintenance System (FARMS).
- D. Educate the public on present funding mechanisms of State Parks (e.g. provide information about status of self-funding of parks on DRED website).
- **II. Objective:** Continue to provide renovation/refurbishment funding to improve local land and water based recreational facilities/areas.

Strategies

- A. (LWCF) Give priority to projects that have an operations and maintenance plan and whose sponsors have shown sound stewardship on existing facilities.
- B. **(LWCF)** Give priority to projects that use Universal Design, environmentally friendly designs, reduce long-term expenses, or cost less to maintain (e.g. native vegetation, energy efficient materials, etc.).

III.Objective: Continue to provide acquisition funding to support new local land and water based recreational lands/facilities.

Strategies

- A. (LWCF) Give priority to projects that have been specifically identified in local or regional plans.
- B. **(LWCF)** Continue to give priority to communities that have had less benefit from LWCF funding in the past.
- C. **(LWCF)** Give priority to projects that use Universal Design, environmentally friendly designs, reduce long-term expenses, or cost less to maintain (e.g. native vegetation, energy efficient materials, etc.).
- D. (LWCF) Give priority to projects that consider stewardship costs in new projects and initiatives.
- E. **(LWCF)** Consider methods of giving priority to projects with a higher level of use, even in low population areas (e.g. OSP will consider possible methods and provide suggestions to DRED and the OPSP Advisory Panel for review).
- **IV. Objective:** Encourage leaders to support financing of local, regional, and statewide plans for open space, recreation trails, and greenways.

Strategies

- A. Educate the public about the benefits of open space, recreation trails, and greenways (e.g. Dollars and Sense of Open Space, economic impacts of trails in communities, etc).
- B. Investigate expanding efforts of the Regional Environmental Planning Program (REPP) through the Regional Planning Commissions.
- C. Encourage public/private financing of these efforts.
- V. Objective: Promote the importance of collaboration and volunteerism in developing and maintaining local recreation projects.

Strategies

- A. (LWCF) Give priority to projects that show local partnerships and commitment to not only developing but also maintaining land and water-based recreational facilities.
- B. Promote volunteerism with school-aged youth in communities (e.g. boys and girls clubs, Americorps, scouts, etc.).

VI. Objective: Explore the possibility of implementing voluntary, dedicated user fees for other recreational uses.

Strategies

A. Educate the public and recreational users about possible benefits of user fee programs and about how money generated from fee programs would be used (e.g. proper fund management would mean that money would go towards supporting the specific recreational use.).

SELECTED CONTACTS & INFORMATION SOURCES

DRED - Division of Parks and Recreation

DRED - Division of Forests and Lands

New Hampshire Fish and Game Department

New Hampshire Association of Conservation Commissions

New Hampshire Department of Transportation – TE Program

New Hampshire Department of Environmental Services

New Hampshire Office of State Planning

New Hampshire Charitable Foundation

Volunteer NH

Appalachian Mountain Club

EDUCATION OF RECREATIONAL USERS, MUNICIPALITIES AND LANDOWNERS ABOUT RESPONSIBLE BEHAVIOR, LAWS, AND LIABILITY

SUMMARY

- Private landowners fear liability when opening up lands to recreational use.
- Communities do not fully understand their liability or rights in providing recreational opportunities.
- Users are not fully aware of their impacts on the environment or on other users.
- Users and providers do not always fully understand existing laws.
- Education should be an important part of early efforts to manage conflict and concerns about overuse/crowding.
- Forty four percent of respondents in the 1997 *Statewide Outdoor Recreation Needs Assessment* completed by the University of New Hampshire said that enforcement of environmental laws should be a high funding priority in the state.

OVERVIEW

Outdoor recreation management brings with it a range of education and information needs. Some information needs are focused on educating the recreational user, while others are aimed at the recreation provider. As participation across a widening set of activities continues to rise, recreation-related education and information will become an increasingly important tool.

Information and education can target many different needs. Some programs provide more information about what recreational opportunities are available across different parts of the state. Other campaigns are focused on building existing skills or teaching new skills. Other efforts aim to better inform landowners about current laws and their liability in allowing public access. Still others could inform municipalities about their rights and responsibilities regarding public recreational use.

Some initiatives are geared towards educating recreationists about outdoor ethics and responsible behavior. Some are voluntary, others mandated by law. This type of education becomes especially important as recreational use and pressure increase. Pressure on the existing resource-base can potentially result in more user conflict as more people compete for the same recreational resources. Education can help to stave off potential conflicts and mitigate existing problems as they arise.

Resource managers are faced with the simultaneous tasks of maintaining user safety, protecting natural resources, and providing high-quality experiences. Heightened public use, as well as expansion of types of use, can present many challenges, especially along trails. This can be especially prevalent in areas that appeal to a broad range of motorized and non-motorized uses. Often problems arise when participation in one activity distracts from another's ability to participate in, or enjoy, another activity.

Examples might include crowding or perceived overuse among hikers on a hiking trail, or problems with motorized and non-motorized boats using the same lake and access area. Of course determining when something becomes a problem can be subjective. Not everyone holds the same standard for determining when an area is 'too' crowded or when they feel there are too many 'incompatible' uses in an area. There are often no singularly right or wrong perspectives. Recreational providers must balance different perspectives with the more essential need to maintain safety, maintain quality recreational experiences, and protect the resources upon which these activities depend.

A 1994 report from the Federal Highway Administration, *Conflicts of Multiple Use Trails*, examined the known research and state of practice on managing multiple use trails. This report provides rules of practice for providing multiple-use trail opportunities as well as suggestions for minimizing conflicts. When exploring options for managing conflicts, the rule of thumb is to start small. Signage, peer pressure and education are all preferable to automatically placing limits on use or erecting barriers.

NEW HAMPSHIRE CONDITIONS AND TRENDS

Recreation-based education and information programs are sponsored by public agencies and private organizations alike. Many programs are undertaken through partnerships that build off the strengths of different entities (e.g. snowmobile clubs and Fish and Game Department). State law mandates participation in a number of recreation-based education programs. These include boater education, hunting education, and youth OHRV education.

Boater Education

As of January 1, 2002, the State of New Hampshire requires that anyone 16 years old or older have a valid safe boating certificate before they operate a power boat on public waters with an engine in excess of 25 horsepower. There is a sliding scale for compliance until 2008 and is based on year of birth. For instance, those born between 1977 and 1987 must comply by 2003. Those born before 1957 must comply by 2008. The boating safety course is a once in a lifetime requirement and, once certified, there is no legal requirement to take the course again. Courses are available through the NH Department of Safety, US Power Squadrons, and US Coast Guard Auxiliary. Courses are also available in all 50 states, online, and as a home study.

Hunting Education

Mandatory hunter education classes are taught through the New Hampshire Fish and Game Department. State law requires that the first time a person plans to buy a basic hunting license, archery hunting license, or trapping license they must first complete the respective hunter, bow-hunter, or trapper education course.

The most widely offered program, Fish and Game's Basic Hunter Education Course, is taught by trained, certified volunteer instructors and the local conservation officer. The

course contains both classroom instruction and field experiences. Topics include safety, hunter ethics and responsibility, outdoor safety and survival skills, along with New Hampshire hunting laws and regulations.

OHRV Education

Off-highway motorized vehicle safety classes are required for children under the age of 16. OHRV Safety Education Classes have proven useful in minimizing accidents and problems on the trail, even as the sport increases in popularity. Accident rates for youth have remained stable in the last seven years even while the numbers of youth registrations have increased. As a comparison, accident numbers among older users (e.g. 20-29 year olds and 30-39 year olds) increase with registration numbers. A New Hampshire Fish and Game official reported that about 1000 children completed OHRV Safety Education Courses in the mid 1990's, as compared to about 2,200 in 2001.

Resident snowmobile registrations have remained relatively stable, showing only a slight increase over the last seven years. Non-resident snowmobile registrations have shown steady increase, up from 8,824 in 1995/96 to 18,363 in 2001/2002. Wheeled vehicle registration has showed substantial increase since the mid 1990's. In 1995/96 there were 10,556 in-state wheeled vehicle registrations. In 2001/2002 there were 20,973 registrations. Out-of-state registrations show a marked increase as well. New Hampshire reported 1,362 registrations in 1995/96 and 4,670 in 2001/2002. As the popularity of motorized recreation increases, so will the demand for trails and riding opportunities. This increased use will demand continued attention to enforcement and education efforts.

Partnerships

Public/private partnerships between State agencies and trail organizations remain crucial in promoting responsible use and managing impacts of use. One existing partnership is with the New Hampshire Snowmobile Association (NHSA) and its network of 115 clubs. Individual clubs work to develop positive relationships with private landowners by doing trail maintenance, policing trails, implementing "Carry Out, Carry In" trash policy, and posting trails on private lands as the landowner requests. The NHSA also works with the New Hampshire Fish and Game Department to conduct youth safety courses and champion "Zero Tolerance for Alcohol" policies.

As pressures on existing trails, recreational areas and lands increase, managers should also increase educational efforts that focus on responsible behavior and user ethics or etiquette. Recreationists and recreational groups are important partners in this effort. Some groups already undertake peer education efforts individually. The New Hampshire Horse Council, for instance, publishes a brochure aimed at educating fellow trail riders about safety, trail etiquette, and personal responsibility. Efforts should be expanded to encourage independent peer-education efforts as well as promoting public/private partnerships to promote responsible use.

Promotional efforts to educate the public about different recreational opportunities should be undertaken in conjunction with efforts to develop awareness of possible impacts of these uses. The New Hampshire Fish and Game Department, for example, publishes a map and guide to public water access sites in New Hampshire. In addition to providing specific information about access sites, including level of accessibility, the map also provides information about existing environmental laws, safety laws, responsible use, water bodies that have known exotic species present, and tips for preventing further introduction of exotic species.

Public Water Access Signs. A new public education sign (Figure 13) is being posted at state-owned and other public water access sites around the state. This water access sign

program is a collaborative effort of the New Hampshire Lakes Association, New Hampshire Rivers Council, and five state agencies (Departments of Safety, Environmental Services, Resources and Economic Development, Transportation and Fish and Game). The sign provides a positive spin on recreational use and a welcoming message, while supplying important information about responsible water recreation use and appropriate practices.



Figure 13. Public Water Access Sign Initiative

Benefits

New Hampshire has a strong tradition of giving private landowners incentives to keep their lands open and undeveloped. Public access to private lands is an important tradition in New Hampshire, and incremental loses of public access will change the face of recreation in the state. Efforts should be made to educate current and potential landowners about statewide incentives and economic benefits of not only keeping lands undeveloped, but also keeping lands open to certain types of outdoor recreation. The Current Use program and the recreation adjustment, in particular, should be highlighted.

The Current Use Taxation Program, under RSA 79-A, was established in 1972 to:

"...encourage the preservation of open space, thus providing a healthful and attractive outdoor environment for work and recreation, maintaining the character of the state's landscape, and conserving the land, water, forest, agricultural and wildlife resources".

Under this program, parcels of land (10 acre minimum) are taxed based on their current use value as open space (e.g. active farm or forest land) rather than on their potential value for development purposes.

Moreover, under New Hampshire's Current Use Program landowners can also accept an additional 20 percent "recreation adjustment" to their taxes. This recreation adjustment lowers a landowner's tax burden by an additional 20 percent if the land is kept open to the public for traditional forms of recreation. As defined by RSA 79-A, the six traditional forms of recreation consist of skiing, snowshoeing, fishing, hunting, hiking, and nature observation year-round unless these activities are detrimental to crops on agricultural lands or active forestry operations.

Liability

While it is important to educate landowners about the benefits of keeping lands open to the public, it is also important to educate landowners about their liability in allowing public use. Liability is of concern to both private landowners and municipal providers, and landowners are not always aware of their protections under state law. Moreover, information on this topic is not always easy to find.

In New Hampshire, private landowners have liability protection based on a number of State laws (RSA 215A:34, RSA 212:34, RSA 508:14). Namely, RSA 215A:34 states that landowners are not required to post their property against OHRV use. Therefore, if a parcel of land is not posted it does not mean that OHRVs are allowed. Riders must have landowner permission. RSA 212:34 or 'Duty of Care' states that landowners are not responsible for keeping their land safe for use by others who may use it for recreational purposes such as hunting, fishing, hiking or operating OHRVs. Finally, RSA 508:14 limits liability of landowners. This law states that landowners who do not charge for the recreational use of their property shall not be liable for unintentional personal injury or property damage. Beyond these legislative protections, the Department of Resources and Economic Development Bureau of Trails, through the use of OHRV fees, supports a landowner liability insurance policy for those landowners who sign OHRV trail agreements.

These protections are important and should be communicated widely in the state, given the substantial acreage privately held but open to the public for low impact uses. In 2001, about 39 percent of lands under Current Use claimed the additional 20 percent tax education by allowing traditional recreational uses. Over 50 percent of Current Use landowners said in a 2001 survey that they do not post their lands. Given the importance of privately held lands to recreation in this state, it is important that education programs continue to build knowledge and awareness of liability among landowners, and knowledge and awareness among recreationists.

Municipalities could also benefit from education efforts targeted towards increasing knowledge about liability and municipal rights related to public recreational uses. One area of growing concern relates to community rights related to regulating OHRV use. An

article published in *Town and Country* (June 2002, pg. 26) by the New Hampshire Municipal Association summarizes several key legislative points.

For instance, communities can regulate the use of OHRVs on town-owned property under RSA 41:11-a. This statute allows the selectmen to manage or regulate the use of town-owned property, including recreational or conservation lands and can, therefore, decide upon allowed or restricted uses on these lands. Another statute, RSA 215-A:6, prohibits OHRV operation on any portion of the right-of-way on public roads, including traveled sections of maintained roads unless specifically permitted. RSA 215-A:15 allows municipalities to regulate OHRV use via local ordinances as long as they are in line with all provisions of RSA 215A. This information is provided only as a general reference point. Refer to the statutes themselves for specific guidance.

RECOMMENDATIONS

Education of Recreational Users, Municipalities and Landowners about Responsible Behavior, Laws, and Liability

GOAL: Improve and increase educational opportunities and outreach targeted to both recreation providers and recreational users.

I. Objective: Educate landowners about the benefits of leaving lands open to the public and the liability protections provided by existing laws

Strategies

- A. Produce and promote a standard statewide brochure about landowner rights and liability protection that would be made available through multiple agencies and organizations (e.g. involve Attorney General's office, State agencies, non-profit organizations).
- B. Target messages to a diverse audience (e.g. realtors, outdoor recreation clubs, condo associations, etc.).
- C. Hold a statewide symposium to promote benefits of keeping private lands open to the public and build awareness of existing liability protections.
- D. Evaluate the feasibility of developing a statewide GIS map and database of lands under Current Use, including those that receive the 20 percent recreation adjustment.
- **II. Objective:** Educate municipalities on liability issues and municipal rights related to recreational use.

Strategies

- A. Work with the municipal insurance providers to develop a municipal workshop explaining legal rights related to recreational use and municipal liability (e.g. municipal law lecture series, NHACC annual meeting).
- B. OSP should update the local guide to recreation financing and include legislative information about liability and recreational use.
- **III.Objective:** Expand education programs aimed at recreationists targeting responsible behavior, environmental ethics, and knowledge of existing laws and penalties.

Strategies

A. Establish a statewide clearinghouse of recreation-based education information and utilize a variety of media and methods to disseminate information (e.g. TV, radio, point of sale, brochures, water access sites, trail-head information, etc).

- B. Encourage local recreation and conservation groups to play a leadership role in presenting education programs (e.g. lakes associations, trail groups, land trusts).
- C. Increase use of existing campaigns/programs such as *Tread Lightly, Leave No Trace, Carry In/Carry Out* (e.g. target retailers as well as recreation and conservation groups).
- D. Incorporate responsible use messages into school and youth programs (e.g. involve service organizations, such as Rotary and Lions Clubs, to help deliver messages to boy/girl scouts and other youth groups).
- E. Build capacity of outdoor recreational organizations to provide peer education.

IV. Objective: Promote education-based strategies to minimize enforcement and use restrictions

Strategies

- A. Address user conflicts and safety issues through education and outreach efforts focused on responsible use (e.g. New Hampshire Snowmobile Association, AMC, White Mountain National Forest, etc.).
- B. Involve stakeholders in discussions about use concerns and potential conflicts early on in the process.
- C. Encourage outdoor recreation and conservation organizations to conduct monitoring, volunteer patrols, trail watches (e.g. lakes associations, OHRV clubs, Upper Valley Trails Alliance, etc.).

SELECTED CONTACTS & INFORMATION SOURCES

Appalachian Mountain Club

DRED – Trails Bureau – also provides links to many trail clubs

New Hampshire Department of Environmental Services

New Hampshire Fish and Game Department

New Hampshire Department of Safety

New Hampshire Office of State Planning

Volunteer NH

New Hampshire Charitable Foundation

New Hampshire Lakes Association

New Hampshire Municipal Association

IMPACTS OF EXISTING LAND USE PATTERNS ON RECREATIONAL OPPORTUNITIES

SUMMARY

- Sprawl promotes automobile use and decreases the amount of available open space in communities.
- Our existing car-based society negatively impacts efforts to promote close to home or neighborhood recreation opportunities.
- Current land use development patterns negatively impact local and regional opportunities for trails and recreation corridors.
- Respondents in the *Statewide Outdoor Recreation Needs Assessment* (UNH, 1997) said that about 50 percent of their outdoor recreational activity takes place within 10 miles of home.
- Seventy-one (71) percent of respondents in this same 1997 statewide survey agreed or strongly agreed that continued commercial development represents a serious threat to New Hampshire's natural and cultural resources.
- Development is consuming more and more undeveloped land, as defined by acres per person, as population increases (OSP, 2000).
- Recreation corridors can also serve as alternative transportation corridors.
- Nationwide Smart Growth initiatives and a new OSP report called *Achieving Smart Growth in New Hampshire* provide principles and tools aimed at improving how our communities develop and grow "smarter".
- An important part of growing smarter includes preserving open space and parks, creating networks of trails and greenways that link community resources, and promoting bicycle/pedestrian friendly communities. All of these goals have a positive effect on local recreational opportunities and have solid links to transportation, health and land use planning goals.

OVERVIEW

State governments and communities across the country recognize potential pitfalls of unmanaged growth and are searching for strategies to grow "smarter". Sprawl and unmanaged growth conger up images of sprawling suburban development, loss of open space, and the deterioration of community character. While there is no concise, single definition of sprawl, The Office of State Planning's *Report to Governor Shaheen on Sprawl* (1999) discusses sprawl as representing patterns of development when more and more land is consumed for various human activities, when the places where we conduct activities are farther apart and homogeneous rather than mixed use groupings, and when we rely on automobiles to connect us to those places. ("Sprawl Report", pg. 4).

In relation to recreation, increased dependence on the automobile and loss of open space negatively impact both the quantity and quality of local outdoor recreation opportunities. Under this type of scenario, walking or biking to a local park or store is replaced by

driving to a park, school, or office on the outskirts of town. Where once stood a large tract of un-fragmented forestland available for hiking and cross-country skiing now stands a new subdivision or shopping plaza. Parks, open space, trails and greenways are important community resources, and an important part of making a community livable.

A wide range of federal and state agencies and organizations, including the National Recreation and Park Association (NRPA), support concepts of "smart growth". While not every organization shares a single definition, there are many common threads. Some over-riding themes include encouraging a mix of land uses, protecting the environment and open space, community involvement in development decisions, providing a variety of transportation options, and fostering distinctive communities.

Ultimately, smart growth efforts offer choices that can help communities grow and develop wisely. Not every tool will fit every community, and there is no single solution for growing smarter. Likewise, there is no single set of standards or sole prescription that will improve outdoor recreation in local communities. Communities must consider local needs and community character when making land use, transportation and recreation-related decisions.

NEW HAMPSHIRE CONDITIONS AND TRENDS

There are several smart growth efforts underway, specifically in New Hampshire, which add increased meaning to these concepts. The Office of State Planning recently conducted a 2000 study entitled *Managing Growth in New Hampshire: Changes and Challenges*. This study found that the population of the state increased by an estimated 60 percent from 1970 to 1998, and, during this same time period, the number of housing units increased by nearly 95 percent. The study not only explored the amount of growth in the state but, through case studies, also explored the physical pattern of this growth. In each of the 10 communities examined, the increase in developed land exceeded the population increase. So while these 10 municipalities on average saw a 71 percent increase in population, they saw a 137 percent increase in developed land. This pattern means that recent increases in population are expressed on the ground by even larger increases in developed land. Development is becoming more spread out (less infill development) and more open space is being consumed in the process.

New Hampshire is clearly a desirable place to live and people from all walks of life can enjoy a high quality of life within its borders. This "quality of life" has strong roots in New Hampshire's abundance of natural, historic and cultural resources, and to some degree, in the ability to access and appreciate these resources. Working forests and agricultural lands, clean rivers and lakes, traditional town greens and historic buildings all help define the state's character. Conserving these resources is vital to our economy, health, and well-being.

Beyond defining the state and community character, these resources provide opportunities for a range of outdoor recreational pursuits. Loss of un-fragmented open space and sprawl diminish both the quality and quantity of outdoor recreational

opportunities. This, paired with a growing population base, growing tourism market, and increase in outdoor recreation participation make discussions about outdoor recreation and its connection with land use planning and smart growth initiatives that much more important.

Current Initiatives

On a policy level, State decision makers recently passed legislation that focuses State, regional and local efforts on promoting sound development patterns. House Bill 712 (Chapter 229, Laws of 2002) aims to coordinate state and local land use planning efforts by improving consistency among master plans developed on a state, regional and community level. The Office of State Planning and the Regional Planning Commissions are charged with developing goals consistent with principles of smart growth and providing guidance and assistance to communities as they develop/revise local master plans.

As part of its charge, the Office of State Planning is instructed to assist the Governor in the creation of a comprehensive State Development Plan. In the past, the State Development Plan was limited to serving as an economic policy statement, but these statutory changes considerably broaden the scope of the Plan, making its content similar to that of a local master plan. The State Development Plan is supposed to reflect the "desires of the public relative to the future," and its overarching goal is to provide cohesion among the plans and programs of state agencies, and to provide the ability to coordinate state agencies' action and projects.

Recreation is specifically identified as one of the main topic areas for the plan. Recreation will be considered alongside other broad topics such as transportation, land use, economic development, and natural resources. Together, these topic areas set the foundation to provide comprehensive and integrated strategies for creating a vision and directing future development in the state.

The Office of State Planning is also developing a toolkit entitled *Achieving Smart Growth in New Hampshire*, which provides a host of local examples and success stories. This toolkit's foundation is based on eight principles, "Principles of Smart Growth for New Hampshire", that reflect the State's definition of smart growth, as enacted by the Legislature in RSA 9-B. These principles have a strong basis in nationwide smart growth principles, but target New Hampshire's individual character.

- Maintain traditional compact settlement patterns to efficiently use land, resources and infrastructure investments.
- Foster the traditional character of New Hampshire downtowns, villages, and neighborhoods by encouraging a human scale of development that is comfortable for pedestrians and conducive to community life.
- **Incorporate a mix of uses** to provide variety of housing, employment, shopping, services and social opportunities for all members of the community.

- Preserve New Hampshire's working landscape by sustaining farm and forest land and other rural resource lands to maintain contiguous tracts of open land and to minimize land use conflicts.
- **Provide choices and safety in transportation** to create livable, walkable communities that increase accessibility for people of all ages, whether on foot, bicycle, or in motor vehicles.
- **Protect environmental quality** by minimizing impacts from human activities and planning for and maintaining natural areas that contribute to the health and quality of life of communities and people in New Hampshire.
- **Involve the community** in planning and implementation to ensure that development retains and enhances the sense of place, traditions, goals, and values of the local community.
- Manage growth locally in the New Hampshire tradition, but work with neighboring towns to achieve common goals and more effectively address common problems.

These principles reflect the strong links between recreation and other planning efforts related to land use, transportation, and health. Take for example the fifth principle, aimed at providing choices and safety in transportation to create livable, walkable communities. This one principle simultaneously works towards fulfilling recreational goals, land use goals, transportation goals, and health goals.

If a community strives to improve its transportation options and expand alternative transportation, it will improve the ability of people to move about the community using multiple modes of transportation. Improving sidewalks, trails, and bike paths and creating trail linkages between important community focal points (i.e. schools, the local library, businesses, residences, and community green spaces) helps refocus the community towards the village or downtown area. This planning effort simultaneously improves recreational opportunities close to home for human powered activities such as walking, bicycling, running, etc. As more people bike or walk around town instead of driving, they spend less time in their car, and more time exercising out in their community. This increase in activity, in turn, fulfills a health and wellness goal of increasing exercise and promoting a healthier lifestyle.

The interconnectedness of these broad principles underscores the need for collaboration of recreation planners/providers with local land use, transportation, and health officials at a state, regional and local level. While much of this may seem simple and almost self-evident in concept, the challenge lies in establishing policies and programs that can have on the ground impacts.

One opportunity for collaboration is with the updated Department of Transportation's (DOT) Statewide Bicycle and Pedestrian Plan. This updated plan, produced in 2000, provides a list of objectives aimed at meeting the goal of supporting and encouraging bicycling and walking as alternatives to motorized forms of transportation and as an element of the state's inter-modal transportation system. Several objectives stated in DOT's plan could also meet statewide recreation-related goals.

Below are some examples:

- DOT will promote bicycling and walking as viable modes of transportation.
- DOT will cooperate with other state agencies in initiating, developing, and implementing programs that encourage bicycling and walking.
- DOT, in cooperation with the Department of Resources and Economic Development (DRED), will propose a statewide plan for the integration of recreational trails with other bicycle/pedestrian facilities, set standards for their development, and encourage and support their improvement to all season condition.

These "alternative transportation" goals and proposed initiatives also serve to improve recreation corridors in the state, including bicycle and pedestrian opportunities for recreational use as well as for transportation. Recognizing and building on the linkages between 'transportation' planning efforts and recreation planning efforts will strengthen both.

Route 2 Corridor Study

The Route 2 Corridor Study undertaken by the Department of Transportation in conjunction with OSP, North Country Council, and others, focused planning efforts on understanding the relationship between land use and transportation within this 35-mile corridor, covering five communities (Lancaster, Jefferson, Randolph, Gorham, Shelburne). The goal was to develop a regional plan that would help to preserve the capacity and improve safety along this important east-west route. Recommendations centered on land use, transportation, access management and bicycle and pedestrian facilities. Examples of recommendations that tie directly to recreation include improving on-road bicycle facilities for long-distance cyclists, developing off-road bicycle and pedestrian facilities for families and as a way to link destinations, improving trailhead parking and access and parking and trails near Reflection Pond.

Historic and Cultural Resources. Historic and cultural resource protection and preservation is an important component of preserving the traditional character of the state. The recently established Land and Community Heritage Investment Program (LCHIP) and its explicit focus on historic and cultural resource protection underscores this.

New Hampshire has a wealth of historic and cultural resources that help define our state. Covered bridges, stonewalls, historic buildings, old barns, and quintessential New England villages are part of New Hampshire's fabric. Our history and culture are also important tourist attractions and enhance some of the most popular outdoor recreation experiences including sightseeing and driving for pleasure.

Historic walks and tours are popular attractions and supported by a range of organizations. For instance, the National Park Service, in partnership with Shaker communities and museums and State Historic Preservation Offices along the East Coast, have established a regional Shaker Historic Trail. This joint effort is aimed at promoting awareness of history and promoting tourism to historic places. New Hampshire's Enfield Shaker Village and Canterbury Shaker Village are part of this regional effort. In addition, the state Scenic and Cultural Byways Program promotes our wealth of culture and natural resources and offers scenic routes and destinations, whether one drives by car or bus, or travels by bicycle.

On a planning level, the Division of Historical Resources recently completed its *New Hampshire's Preservation Plan* in 2001. This plan emphasizes the need for public education and outreach to promote greater awareness and appreciation of the state's cultural resources, as well as planning and protection to better integrate preservation planning into larger decision-making on a state, regional and local level.

Other Initiatives. The eight principles discussed above are often advocated by organizations and businesses in New Hampshire, alongside government. A new initiative represents another opportunity for collaboration. The New Hampshire Smart Growth and Livable Communities working group, funded in part through the New Hampshire Charitable Foundation, aims to "build cross sector linkages and identify an agreed-upon agenda for action on Smart Growth issues in New Hampshire".

The group, made up of a range of organizations and interests including planning, tourism, New Hampshire's Main Street Program, energy, business and industry, public health, cultural/historical, transportation, conservation, to name a few, emphasizes the need to build partnerships, collaboration, and linkages among these groups and focus on a common agenda to help New Hampshire grow smarter in the future. This broad-based, public-private collaboration will include a yearlong forum to help definite issues, identify leverage points and build agreement. The second phase, scheduled for late 2003 or early 2004, will then set an agenda for a smart growth action plan.

Local Examples

Communities in New Hampshire are already undertaking a number of initiatives, to help protect open space, enhance traditional community character, and improve transportation options. Many have direct links to recreation. The Office of State Planning is currently preparing a tool kit filled with examples and success stories.

Some communities have implemented open space or cluster developments as a way of both accommodating growth and protecting open space. In this zoning provision, plans

for new housing development start with protecting important open space and incorporating housing into smaller lot sizes. Crockett Farm in Stratham is one example. This open space or cluster project allows for smaller lot sizing, with open space surrounding the housing to provide habitat for wildlife and maintain natural areas for low impact recreational activities. In addition, areas of working forest land and open farm fields have been maintained through conservation easements.

Many communities are encouraging use and appreciation of their waterfront and downtown area by establishing trails and parks and linkages within central areas of town. This larger community improvement effort also improves recreational opportunities. In one example, the town of Littleton is working to enhance and link a series of riverfront pocket parks including one in front of the Littleton Area Senior Center and facing downtown. These sites provide open access to the river, including swimming in the summer months. Using DOT Transportation Enhancement funds, efforts are underway to develop a river walk and pedestrian bridge across the Ammonoosuc River to enhance connections to downtown.

In the city of Dover, a pedestrian/bicycle covered bridge connects downtown mill buildings with the soon to be redeveloped commercial district across the Cocheco River. This bridge also links with a nearby park to complete a walking loop. In downtown Plymouth, the NH Fish and Game Department has developed a boat access facility to provide river access for boating as well as riverfront access for pedestrians. This site is situated in the heart of the town near the Plymouth Area Senior Citizens Center and the Plymouth District Court. Boaters can also rent kayaks from a nearby shop and walk to the access site.

Planning for Outdoor Recreation

Local decisions that impact community outdoor recreation opportunities are made by a variety of different entities. While many communities have a recreation director or recreation commission in charge of community 'recreation', this entity (entities) is not solely responsible for providing or looking after all community-based recreational opportunities.

Community outdoor recreation can involve a range of local leaders and staff. Often a conservation commission is responsible for managing a town forest or town natural areas, both of which can provide outdoor recreation opportunities and a variety of trail uses. Together with the board of selectmen, a planning board may make decisions about Class VI roads, sidewalks, and recreation features of new developments. It is important to support efforts to improve communication between these decision-makers in both the town master planning process and in the management and discussions about municipal recreational resources.

In addition, improvements could be made on a statewide policy level to improve how recreation is defined or discussed under State law. One specific suggestion is to clarify and improve upon the reference to recreation in RSA 674:2, the state statute on local master planning. At this time communities are encouraged to develop a chapter on

recreation that "... shows existing recreation areas and addresses future recreation needs." There is a concern that this definition provides communities with little guidance for developing a high-quality recreation chapter within their local master plan, one that would truly consider the broad range of recreational features in a community. Given this concern, the Office of State Planning will take a lead role exploring and suggesting legislative changes to this statute.

RECOMMENDATIONS

Impacts Of Existing Land Use Patterns On Recreational Opportunities

GOAL: Promote growth and development patterns that encourage local recreational opportunities and preserves undeveloped lands for future recreational use.

I. Objective: Incorporate outdoor recreation more fully as an issue within larger discussions of "smart growth".

Strategies:

- A. Develop statewide, regional, and local partnerships between recreation planning efforts and those related to land use, transportation, and health (e.g. NH Celebrates Wellness, DOT, OSP, DRED, DHR).
- B. Support reauthorization of a federal transportation bill that continues or expands upon TEA-21 in its support of bicycle and pedestrian facilities.
- C. Emphasize to communities the benefits of conducting natural resource inventories and developing conservation/open space plans as part of larger community planning efforts.
- D. Broaden enabling legislation for impact fees that would expand allowable uses to include open space and recreation infrastructure.
- E. Improve cross-links between the land use, open space, cultural and historic resources, transportation, and recreation chapters of local master plans (e.g. encourage communities to include a key at the end of each chapter explaining links with other chapters).
- F. Promote interagency coordination to address regional recreation, trail and open space needs (e.g. explore expanding the role of the Statewide Trails Advisory Committee in addressing regional trail needs).
- G. Encourage Regional Planning Commissions to coordinate and develop multicommunity recreation and open space plans (e.g. Central New Hampshire Regional Planning Commission open space and trail planning assistance).
- H. Improve upon existing references to recreation in state statutes (e.g. OSP will work to revise reference to recreation in RSA 674:2).

II. Objective: Promote local development that is sensitive to protecting and enhancing local land and water-based recreation and natural and cultural resource protection opportunities.

Strategies:

- A. **(LWCF)** Give priority to projects that provide community linkages/improve connectivity (e.g. bicycle/pedestrian linkages between residences, boat access, recreational fields, schools, library, etc.).
- B. (LWCF) Give priority to land acquisition projects that protect resources most threatened by land use changes.
- C. Support efforts to create local and regional networks of trails and greenways (e.g. Winnipesaukee River Trail, Sunapee Ragged Kearsarge Greenway, etc).
- D. Support efforts that link community resources via trails and improve the overall connectivity of trails (Derry Pathways, etc.).
- E. Better incorporate open space and trails planning efforts into local and regional planning and land use decisions.
- F. Develop a joint education program targeted towards recreation departments, conservation commissions, and other appropriate boards focused on building awareness of the linkages between recreation and conservation.
- G. Promote "Walk to School" and other "Walk to" or "Bike to" programs.
- **III.Objective:** Educate communities about the importance and economic and non-economic benefits of local, close to home recreational opportunities.

Strategies:

- A. Educate the public about the economic value of recreational opportunities in local communities (e.g. education and outreach efforts focused on promoting the values of trails, clean surface water, open space, and non-motorized travel within a community etc.).
- B. Identify and promote existing strategies that successfully integrate recreation resource protection and community economic development.

SELECTED CONTACTS & INFORMATION SOURCES

New Hampshire Office of State Planning

New Hampshire Department of Transportation – Bicycle/Pedestrian Program

Regional Planning Commissions

New Hampshire Charitable Foundation

New Hampshire Main Street Program

Appalachian Mountain Club

New Hampshire Municipal Association

New Hampshire Minimum Impact Development Partnership

Smart Growth Network

IMPORTANCE OF LOCAL OUTDOOR RECREATION OPPORTUNITIES AND OPEN SPACE PROTECTION IN PROMOTING INCREASED HEALTH AND WELLNESS

SUMMARY

- Obesity in kids/adults has been labeled as an epidemic in the US. Trends are similar in New Hampshire.
- Physical activity levels among adults and children in New Hampshire are below national recommendations.
- Providing open space, parks, trails, and greenways for "recreation" can be an
 important part of larger community efforts to develop more livable/walkable
 communities.
- Partnerships and links between health and recreation are being developed on the
 national level. The Center for Disease Control sponsors an initiative (Active
 Community Environments) to promote walking, bicycling and the development
 of accessible recreation facilities. One of the major initiatives consists of a new
 partnership among 11 federal programs in 4 different federal agencies (including
 the National Park Service and US Forest Service) to promote healthier lifestyles
 through recreation and physical activity.
- Providing outdoor recreation opportunities within neighborhoods and communities and providing better access to information about recreational opportunities have been identified as important tools to address obesity and lack of physical activity.
- Nationwide initiatives and partnerships are also in place to promote use of trails
 as 'pathways to health' and to promote community partnerships aimed at
 encouraging physical fitness. Promoting trails and trail use is seen as a way of
 reaching the largest segments of the community. Walking/trail activities are the
 most popular recreational pursuits in the US, even among those 60 + years of
 age.
- *Healthy New Hampshire 2010* provides a statewide agenda to improve health in New Hampshire. Increasing physical activity and lowering obesity/overweight is part of this effort.
- Livable, Walkable Communities (LWC) coordinated by New Hampshire Celebrates Wellness, is currently working to expand knowledge about and promote the important role community design and the built environment play in either promoting or impeding physical activity.

OVERVIEW

Recreation plays an important role in promoting individual wellness and supporting healthy communities. Lack of exercise and poor diet are two main factors contributing to obesity. The Department of Health and Human Services reports that, as of 1999, 61 percent of adults were overweight nationwide. Of particular concern is the fact that 14 percent of children and adolescents were overweight and this percentage has tripled since

1980. According to the Surgeon General, adult obesity rates have doubled since 1980. Less than 33 percent of adults engage in 30 minutes of moderate physical activity five or more time a week (federal recommendations) and 40 percent participate in no leisure-related physical activities.

A recent surgeon general report highlights a number of community-based strategies aimed at encouraging healthier lifestyles and promoting physical activity. Some are aimed specifically at promoting physical activity locally and make a strong case for partnering with recreation providers and planners. One identified strategy is to make community facilities available for physical activity for all people, including on the weekends. Another is to create more opportunities for physical activity at work sites. These broad recommendations are important from a health and wellness perspective and from a recreation perspective.

The Robert Wood Johnson Foundation recently published a report entitled *Healthy Places*, *Healthy People*; *Promoting Public Health & Physical Activity through Community Design* (2001). This report stresses the importance of community design and the way our built environments are constructed in either promoting or impeding physical activity. Existing environments too often focus exclusively on the automobile and communities are losing open space and good access for walking or bicycling.

NATIONWIDE CONDITIONS

Healthy People 2010, a publication of the US Department of Health and Human Services, provides information about a range of different leading health indicators (LHI). Physical activity and obesity are both specifically identified in the report as LHIs. The report highlights that only 15 percent of adults performed the recommended amount of physical activity in 1997, and 40 percent of adults participated in no leisure-time physical activity. Outdoor recreation provides an important outlet for promoting physical activity.

The benefits of physical activity have long been known. Regular physical activity can control weight, improve psychological well-being, and reduce symptoms of depression and anxiety. A range of socio-demographic characteristics can influence activity levels. Research has shown that adults in northeastern and southern states tend to be less active than adults in western and north central states. Women tend to be less active than men, across all adult age groups, and adults with lower education and income tend to be less active than average. Reasons people cite for not increasing activity levels include both personal and environmental factors such as lack of time, lack of access to convenient facilities, and lack of a safe environment where they can engage in physical activity.

Programs and Partnerships

In response, the US Department of Health and Human Services, Centers for Disease Control (CDC) is developing programs and partnerships to combat these trends. One such program is the CDC sponsored, Active Community Environments (ACEs). This initiative promotes walking, bicycling, as well as widely accessible recreational facilities. Two of ACE's main goals include encouraging bicycle and pedestrian friendly

environments and promoting self-powered forms of transportation (walking, bicycling). Community characteristics, such as housing density, road/street design, availability of public transportation, and availability of bicycle and pedestrian opportunities, among others, are important factors behind promoting or hindering physical activity locally.

An important ACE initiative consists of a new partnership among 11 federal programs in 4 different federal agencies (including the National Park Service and US Forest Service) to promote healthier lifestyles through recreation and physical activity. Providing outdoor recreation opportunities within neighborhoods and communities and providing better access to information about recreational opportunities were identified as important tools to address obesity and lack of physical activity.

Other nationwide initiatives and partnerships are also in place to promote use of trails as exercise and to support community partnerships aimed at encouraging physical fitness. The Department of the Interior, of which the National Park Service is a part, is promoting the use of trails as "Pathways to Health". Promoting trails and trail use is seen as a way of reaching the largest segments of the community. Walking/trail activities are some of most popular recreational pursuits in the US, even among older segments of the population.

Public private partnerships are critical at a national level, and serve as a model for developing similar initiatives at a state or local level. The National Recreation and Park Association (NRPA) has entered into a memorandum of understanding with the US Department of Health and Human Services to develop a strategic partnership that promotes physical activity. The purpose is to reach goals proposed in *Healthy People 2010* as they relate to physical activity, obesity and overweight. Goals include: increasing the level of physical activity among youth and adults; reducing levels of obesity among youth and adults; and reducing environmental barriers to physical activity at the community level, with special emphasis on removing barriers for the disabled. Selected strategies set forth include the following:

- Population and community-based health education and health promotion activities:
- Activities that utilize technology to increase awareness of the local access and opportunities for physical activity;
- Coordination of public awareness and media activities that include the Leading Health Indicators (LHIs) and that address the imperative of increasing physical activity, promoting healthy behaviors, and increasing quality and years of healthy living;
- Joint efforts to promote professional education and training, dissemination of best practices, and joint efforts to mobilize communities around the *Healthy People 2010* objectives and the Leading Health Indicators;
- Activities designed to reach the community level, including but not limited to encouraging partnerships locally;
- Activities that augment data collection efforts;
- Increased collegiality, recognition, support, and resource sharing; and

• Strategic leveraging of resources among organizations.

Safety. Safety at recreational areas is also part of promoting health and wellness. The US Consumer Product Safety Commission (CPSC) has recently updated its *Handbook for Public Playground Safety*. The purpose is to help communities, schools, day care centers, corporations, and other groups build safe playgrounds. The publication provides information detailing technical safety guidelines for designing, constructing, operating, and maintaining public playgrounds. This guide is available on line at (http://www.cpsc.gov/CPSCPUB/PUBS/325.pdf).

NEW HAMPSHIRE CONDITIONS AND TRENDS

In New Hampshire the Department of Health and Human Services and the Healthy New Hampshire 2010 Leadership Council, recently produced *Healthy New Hampshire 2010*, the state's first disease prevention and health promotion agenda. One of the main focus areas identified in the plan deals with nutrition and physical activity.

The report states that 50 percent of New Hampshire adults are overweight or obese and 9 percent of 9th-12th graders are overweight. The goal is to reduce New Hampshire's adult overweight and obesity figures to 40 percent by 2010 and of 9th-12th graders to only 5 percent. Another main goal is to increase the levels of physical activity among adults and kids. The goal is to increase regular physical activity up to 50 percent for both adults and high school students. Figures now are around 24 percent for adults and 27 percent for 9th-12th graders.

New Hampshire Celebrates Wellness coordinates a statewide Livable, Walkable Communities (LWC) initiative. Main goals are to raise awareness about the importance of walking, bicycling, and non-motorized linkages in communities, and provide tools to help communities understand how the built environment can affect these opportunities. Non-motorized linkages are important for both community health and recreation and as well as for transportation. Promoting awareness is a first step in increasing informed public demand for more bicycle and pedestrian friendly communities. The LWC initiative is modeled of the Active Community Environments initiative discussed above.

Towns in New Hampshire are already focusing efforts on improving the pedestrian scale of their local built environment. Both grant funds and concerted local efforts can make substantial, on the ground changes to encourage bicycle and pedestrian use.

Derry Pathways

The Town of Derry has been working since 1993 to realize its goal of becoming a more bicycle and pedestrian friendly town, both to promote recreation and better health. An important first phase of this is now complete thanks to years' worth of volunteer efforts, town funds, and Transportation Enhancement grant monies. Linkages to recreational areas, stores, schools, and library form an important part of this loop effort. Through a mix of on-road and off-road pathways the loop circles several schools, a downtown golf course, medical centers, several ball fields, the downtown area with shopping, town offices and restaurants, as well as a playground and park. Maintenance is encouraged by voluntary Adopt-a-Spot campaigns, as well as through the town Public Works Department. The Pathways Committee continues work on efforts to expand the pathway.

RECOMMENDATIONS

Importance Of Local Outdoor Recreation Opportunities And Open Space Protection In Promoting Increased Health And Wellness

GOAL: Promote health/wellness benefits gained from improving recreational opportunities and bicycle and pedestrian linkages in communities.

I. Objective: Broaden and strengthen partnerships.

Strategies:

- A. Build connections with the NH Department of Transportation, local public works departments, and local boards to promote bicycling and pedestrian connectivity and non-motorized transportation networks.
- B. Focus health/wellness education and outreach efforts on local recreation providers (e.g. target recreation directors, recreation commissions, and involve Governors Council on Physical Education, Department of Education, Healthy Communities Foundation, etc.).
- C. Investigate and encourage local participation in statewide health promotion and education activities (e.g. breast cancer walks, March into May, Great American Smoke Out, Great American Work Out).
- D. Partner with hospitals, local wellness teams, and schools to coordinate education efforts and develop cross-promotion efforts.
- **II. Objective:** Increase public awareness of access and opportunities for recreation and physical activity locally.

Strategies:

- A. Cross promote health programs as aspects of other initiatives and incorporate physical activity within other organizations' activities (e.g. establish historic walking tours in conjunction with the local historical society or historic commission).
- B. Work with business and industries to promote understanding of the importance of recreational opportunities for employee health (e.g. Business and Industry Association, etc.).
- C. Develop statewide database (web site) that lists ideas and programs that have been successful.

III.Objective: Consider special needs of youth, elderly and disabled populations in promoting health and wellness through outdoor recreation.

Strategies:

- A. Improve existing and new recreation opportunities by enhancing non-motorized (bicycle/pedestrian) accessibility and connectivity. Non-motorized access is particularly important to youth, elderly and disabled populations.
- B. Encourage lifetime recreation and physical activity curriculum in school programs (e.g. bicycling, walking, etc.).
- C. Encourage the Department of Resources and Economic Development and the Fish and Game Department to develop long-term disability plans for public lands and implement universal designs.

IV. Objective: Promote health and wellness messages in existing recreation areas.

Strategies:

- A. Encourage the State and communities to adopt no-smoking policies in highdensity recreation areas (e.g. State and community parks), and emphasize awareness of cigarette butts as litter).
- B. Encourage health food concession alternatives at parks and sporting events (e.g. beaches, swimming pools, football games, etc.).
- C. Encourage communities to post the health benefits of physical activity in existing recreation areas (e.g. post health messages and mileage markers along a town pathway or trail).
- D. Encourage use of appropriate equipment in parks (e.g. use of helmets in skate parks, etc.).
- E. Encourage parks to promote safe playground standards.

SELECTED CONTACTS & INFORMATION SOURCES

New Hampshire Department of Health and Human Services
University of New Hampshire Cooperative Extension
US Department of Health and Human Services
US Centers for Disease Control
Appalachian Mountain Club

PLAN IMPLEMENTATION

OVERVIEW

While emphasis must be placed on addressing these six individual issue areas, there is an overarching need to improve upon the way outdoor recreation planning is incorporated into larger, broader decision-making in the state. Improving upon this process will help improve overall plan implementation and is critical to making these suggested recommendations more viable and feasible. With this in mind, improving overall coordination will be the first step in moving towards SCORP implementation.

The SCORP Steering Committee emphasized, and the SCORP Public Advisory Committee concurred, that SCORP planning should be an on-going effort with emphasis on implementation and progress. The goal is to keep the SCORP alive and up to date. Discussion focused on revamping collaboration and joint outdoor recreation planning efforts to produce a more consistent, yearly process.

In order to foster plan implementation, the SCORP Steering Committee recommended that the first plan of action should be to establish a more permanent outdoor recreation review committee or oversight committee. Such a committee is deemed critical to facilitating plan implementation, and addressing critical recreation issues. Given that a wide variety of agencies and organizations are involved in outdoor recreation provision in New Hampshire, it stands that wide range of perspectives should be included in ongoing, coordinated discussions about priorities and strategies.

The SCORP Steering Committee felt that a statewide recreation committee could respond, as an established entity, to statewide recreation-related challenges, research needs, and issues that arise in the ensuing five years before another SCORP plan is developed. Establishing a permanent committee that meets at least on an annual basis will make a better planning process than one that starts when a new plan is needed and stops when the plan is finalized.

In addition, efforts should be made to increase the awareness of the SCORP and its recommendation among state agencies, possibly through the Council on Resources and Development (CORD), as well as via other legislatively mandated and organized committees. OSP will work to improve these linkages, identify possible partnerships and will promote understanding of how other initiatives, missions, and goals relate to the wide reaching subject of outdoor recreation.

NEXT STEPS

Oversight Committee

To aid implementation of individual strategies set forth in this plan, OSP, in conjunction with DRED, will work to establish an outdoor recreation oversight committee as specifically recommended by the current SCORP Steering Committee. In the interim, the existing SCORP Steering Committee will continue to meet until this more permanent

committee can be established. The current committee will work with OSP and DRED to develop specific strategies for establishing the role and membership of oversight committee and establish initial goals and priorities.

While specifics are yet to be determined, the SCORP Steering Committee felt that is important that the State leadership be involved in identifying this new committee. In addition this group also suggested several starting points for discussion. Two potential alternatives mentioned would make use of existing committees. One suggestion is to utilize the existing Open Project Selection Process Advisory Panel. Another suggestion is to reappoint, in a more permanent fashion, the existing SCORP Steering Committee. While the exact makeup is still unknown, the new committee is envisioned to meet at least on an annual basis and focus on plan progress, partnership development, and implementation strategies.

The current SCORP Steering Committee felt it important to allow this new entity to establish SCORP priorities and a more formal action plan. Therefore, an action plan will not be included in this phase of SCORP planning process, but will be included in the next phase. This will be an important early task for the formalized oversight committee.

OSP's Role

Beyond early efforts to work with State leadership in the development of an outdoor recreation oversight committee, the Office of State Planning will also continue to oversee the SCORP and promote plan implementation. In general:

- OSP, through an ongoing agreement with DRED, will be responsible for measuring progress and coordinating planning efforts for SCORP maintenance in the interim before the next SCORP plan is developed in 2007.
- OSP will utilize an oversight committee to identify yearly goals and priorities based on the list of established SCORP recommendations and will review annual progress and success. A SCORP action plan will be produced to provide guidance and direction about the priorities and potential partners.
- Under the review of the committee, OSP will evaluate the possibility of developing a coordinated *outdoor recreation research plan* to identify statewide recreation-related research needs, as well as identify priorities, partnerships and potential funding sources for completing such research.